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## LECTURES

ON

## DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

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### LECTURE VI.

### ANEMIA OF THE BRAIN AND CEREBRAL HEMORRHAGE.

GENTLEMEN,—We have now traced the history of two of the great divisions under which we arrange diseases of the central part of the nervous system, viz., congestion and inflammation. We shall now, therefore, pass to a consideration of the accidents connected with anemia, and then terminate this part of our subject with cerebral hemorrhage, or apoplexy.

Anemia of the nervous centres is a disease which is especially remarkable in this point of view, that it often gives rise to phenomena which very closely resemble hyperemia, and yet it is evidently a matter of the utmost importance to distinguish these two opposite states from one another. In practice, you will frequently have to ask yourselves this question, "Do the functional derangements of the nervous system which present themselves, depend on too great an afflux of blood to the brain, or are they connected with a condition quite opposite, viz., anemia?" It is unnecessary to say, that hyperemia and anemia will require different modes of treatment; let us, therefore, enter into a few considerations on this latter disease; and first, for the

*Anatomical Characters of Cerebral Anemia.*

Anemia of the nervous centre is characterized, as its name would lead you to suppose, by a marked decoloration of the substance of the brain. The gray substance is much more pale than in the normal state; it contains a less number of vessels, and thus approaches in its general appearance to the white or medullary portion of the brain. In some cases the organ looks as if it had been macerated in water for a considerable time; and BILLIARD relates that he has sometimes found the cortical substance of the hemispheres so completely decoloured and pale, that the surface of the brain resembled a mass of modelled wax. The state of the nervous centre just described, may exist alone, or become complicated with other changes of structure. In some cases it has been observed to coincide with a peculiar hardening of the cerebral mass; in others the brain is softened, and does not present its usual consistence; however, we now propose to examine anemia in its simple form, when it exists alone, and without any complication.

*Its Symptoms.*

Anemia may be confined to the brain itself, or coincide with a similar state of anemia in the rest of the body. Thus we have frequently occasion to observe it after the occurrence of considerable hemorrhages; or it may be a consequence of chronic or acute disease. The influence of the latter cause is often seen in children affected with acute gastro-enterite, at the termination of which we observe symptoms that seem to announce a state of irritation in the brain, while, on the contrary, the organ is anemic, and presents, after death, an extreme degree of paleness. Sometimes, however, anemia of the brain may occur without any disorders which indicate a diminution in the general quantity of the blood, or a deterioration of its quality. Here the disease is confined to the brain alone, and depends on causes peculiarly influencing the circulation in that organ.

Anemia gives rise to the existence of certain symptoms, whose connection with it as a cause we can prove upon living animals. If we bleed an animal to such an extent as suddenly to deprive him of a large portion of blood, we give rise to a series of symptoms that, under other circumstances, we might easily attribute to excitement of the

nervous system, and the animal is seized with general convulsions, and these become more and more intense in proportion as the brain becomes empty. In the human subject we observe the same phenomena. After traumatic hemorrhage, copious loss of blood in uterine hemorrhages, &c., the patients are frequently attacked with nervous delirium, convulsions, and other symptoms, which we have pointed out when treating of congestion. Hence we establish this general rule, most important in practical application, that a diminution of the normal quantity of the blood gives rise to the same symptoms as hyperemy, or an increased quantity. Look at the digestive organs: a difficulty of digestion coincides equally with an increased injection of the mucous membrane of the stomach, and with an abnormal paleness of this same membrane. In the latter case, as in the former, digestion is troubled, because the organ no longer receives the quantity of blood necessary for the normal accomplishment of its function. In the lungs, dyspnœa is equally produced, either by an hyperemia more or less considerable of the pulmonary tissue, or by the fact that the air, in penetrating the vesicles, does not find enough of blood to vivify. In the centre of the circulating system we may observe a similar phenomenon; thus the heart is equally affected with palpitations when it is distended with an over-quantity of blood, and in the opposite condition, when its cavities are imperfectly filled by a poor and impoverished fluid.

These examples we might multiply infinitely. The nervous centres furnish us with a great number. We may therefore, I say, lay it down as an established principle, that the brain, like the other great apparatuses, presents specific symptoms when it ceases to be stimulated by the normal quantity of blood. Let us briefly enumerate these symptoms. They are, 1st, Those connected with the intelligence. Delirium is a common symptom of cerebral anemia. Dr. PAPAVOINE, an ex-interne of the *Hopital des Enfans Malades*, has published several cases of children affected with the most violent delirium, and dying in this state. After death no other lesion could be discovered in the brain, except a complete decoloration of the gray substance which appeared confounded with the white.* We observe the same delirium in persons accidentally submitted to a forced abstinence, or in patients weakened by a former malady, and kept on too severe or prolonged a diet. In these cases we observe functional disorders, resembling closely those depending upon congestion, but certainly in no way connected with that state, for they gradually disappear as the blood is regenerated, and under the influence of a generous and wholesome alimentation. Examples of this kind are chiefly seen in children, or in individuals endowed with what is called a nervous temperament. You have already seen how hyperemia and inflammation of the brain are often produced by increased stimulation of that organ. We may produce the same effects, or, rather, give rise to the development of exactly similar functional disorders, by withdrawing the quantity of any stimulant to which the brain has been accustomed.

A remarkable case of this kind has been published by a German physician, Dr. HANSBRANDT. It illustrates perfectly the point we have just advanced: — A man, given excessively to drinking, was thrown into prison for theft, and of course reduced at once to the prison diet, bread and water. After a week or two living in this new fashion, the intellectual faculties of the prisoner commenced to show some symptoms of trouble; his strength and flesh declined at the same time; finally, he was seized with delirium, which, at first tranquil, became afterwards more and more furious; the patient cried out from time to time in the most agonized manner, and thought he was constantly surrounded with horrible figures. The physician called to attend him in this dangerous state, having informed himself of his previous habits, suspected that the cause of his mania and other symptoms consisted in the abstinence from spirituous liquids which he was compelled to observe; he therefore ordered a small quantity of brandy to be given twice a day; the effect of this change of regimen was soon obvious; the cerebral accidents gradually disappeared, and the patient recovered his flesh and strength, and continued to enjoy perfect health during the remaining period of his detention.*

The faculty of movement is also more or less disturbed, in consequence of cerebral anemia; thus, we have already noticed the convulsions which supervene after copious hemorrhage, or in animals from whom a large quantity of blood has been designedly abstracted. The sensibility is sometimes modified in a remarkable manner; the least stimulant produces effects infinitely more rapid and energetic than we observe in the normal state of the economy. In several cases of anemia, it is not rare to see a marked exaltation of sensation. If we place a blister on the skin, the sensibility is awakened at once, acute pain is produced in the part, and the whole system partakes of the excitement. This is a point to which you should pay attention in practice. When your patient's strength has been considerably reduced by sanguineous emissions, be particularly cautious and reserved in the employment of cutaneous stimulants; a

* Journal Hebdom. de Médecine, Dec. 1825.

* Journal des Progrès, &c., t. 1, p. 288.

single blister, a sinapism, may be enough to produce a degree of local disturbance or general excitement which you may have great difficulty in mastering.

*Treatment of Anæmia.*

We have now laid before you the prominent characters of anæmia as connected with the central organ of the nervous system. It remains to say a few words on the treatment of this disease. The analogy between the symptoms of hyperæmia and anæmia has been frequently alluded to. Your first care must, therefore, be to distinguish between them. Having once satisfied yourselves that the nervous symptoms under which the patient labours, depend not upon congestion of the brain, but on anæmia, the indication is a very simple one. You must employ every means in your power, by which the normal quantity and quality of the blood may be restored; in a word, you must make new blood. Be careful above all things not to attribute the phenomena of cerebral anæmia to any other cause, or you may commit the most fatal errors in practice. Thus, for example, when a patient in the last stage of typhus fever, after twenty or thirty days' suffering, after strict abstinence &c., is seized with delirium and other cerebral symptoms, are we at once to conclude that he has congestion or inflammation of the brain? Certainly not. Support your patient under these circumstances with moderate cordials, light nourishments, &c, and you cure. Bleed him, and you hasten the fatal termination.

CEREBRAL HEMORRHAGE.

We have now studied several morbid conditions of the brain; we have next to take up a subject to which more interest is attached than perhaps to any of the questions that have hitherto occupied our attention; we have to investigate the nature, symptoms, and treatment, of cerebral hemorrhage. This disease, as you know, has been long known under the name of *apoplexy*, a term employed to indicate a sudden loss of motion, sensibility, and intellect, supposed to depend upon effusion of blood into the brain, but I think that

*We cannot preserve the word "Apoplexy" any longer in the Science.*

It is too vague; it does not indicate with precision the material change in the organ, but, like all other similar terms capable of various interpretations, it lends itself to every theory, and in the end serves no real purpose but that of covering our ignorance. For, observe how many different affections of the brain give rise to the same symptoms as apoplexy,—viz., sudden loss of consciousness and motion. See how the effects of simple congestion, of ramollissement, &c., are equally comprised under this generic term. On the other hand, hemorrhage into the substance of the brain (the essential anatomical character, remark, of apoplexy) may take place without producing the ensemble of symptoms compressed under the word apoplexy. Thus we may have hemorrhage of the brain without loss of intellect. We may observe loss of intellect, and derangement of sensibility, while motion remains intact. You will see this presently. We therefore, I say, must reject the term apoplexy from medical nomenclature, because it refers to various forms of injury in the brain. We reject it, because it represents identical symptoms depending upon various and quite different causes.

*Situations of Cerebral Hemorrhage.*

Hemorrhage of the centre of the nervous system may occur at any point of the cerebro-spinal axis. However, it has been observed more frequently in the substance of the hemispheres than in any other part. Again, there are certain portions of the hemispheres which seem much more subject to this accident than others. Thus, from an examination of a large number of cases of cerebral hemorrhage, we find a great majority to take place in the nervous pulp, on a level with, and outside of, the corpora striata and optic thalami. One or other of these latter parts may be attacked in an isolated manner, or both together; but it would appear that the striated bodies are much more subject than the thalami to effusions of blood. Again, the hemorrhage may exist beyond the points we have just mentioned, or in the mass of nervous matter called centrum ovale. Finally, in some cases the effusion of blood does not take place in the interior of the brain, but at its surface. The blood is shed between or on the convolutions, and then represents an uniform layer, spread over an entire hemisphere; or it may be confined to a single lobule.

There are, again, other parts of the cerebro-spinal axis in which effusion of blood may take place, but much less frequently than in those we have now spoken of. Thus, hemorrhage occurs in the substance of the pons varolii, or in the prolongations which it sends off to the cerebrum or cerebellum; or, finally, in the substance of the latter organ itself. Apoplexy of the cerebellum is, however, a very rare disease, and here, as in the cerebrum, the effusion may have its seat in the median lobe, or in one of the lateral hemispheres. The medulla oblongata also presents us with examples of hemorrhage, and the spinal column in any one point of its extent.

The central parts of the brain, properly so called, are much less frequently the seat of hemorrhage. Thus it has been observed but seldom in the inferior part of the centrum ovale, and in the septum lucidum in

particular. Authors sometimes speak of another species of hemorrhage, viz. that which takes place in the interior of the ventricles; but these also are rare. We certainly find blood effused into the cavity of the ventricles in many cases of apoplexy; but if you examine with care, you will find the blood has made its way from the nervous pulp surrounding them; or, for example, when the septum lucidum is broken down, the blood may traverse that space, and pass into the other ventricle; both cavities will then appear full of blood, but there is almost always a communication between them and the accidental cavity formed by the effusion of that fluid into the substance of the brain. The hemorrhage may take place in the tissue of the pia mater, which envelops the cerebral convolutions. This form of effusion has been called by M. Serres "meningeal apoplexy;" it is a very rare variety, and when we have occasion to observe it, we generally find at the same time an effusion of blood in the brain. The fluid finds its way into the membrane from the apoplectic cell, in the same manner as it does into the ventricles. Sanguineous effusions into the centre of the nervous system differ considerably in extent in different cases. Sometimes the cell is excessively small: so insignificant that it would scarcely contain a pin's-head. In other cases the hemorrhage has been abundant: the cell is vast, and occupies nearly the whole of the hemisphere. The number of these apoplectic cavities is as various as their extent; we may find but a single one; sometimes two or more. In some cases, on the contrary, the brain appears, as it were, riddled with an immense number of these hemorrhagic cavities, which have been formed either at the same time or successively, one after the other. Certain effusions of blood exist frequently alone; for example, those seated in the different parts of the hemispheres; but others, on the contrary, do not occur unless we have effusion somewhere else. Thus in by far the greater number of cases where blood has been found effused into the substance of the cerebellum, an hemorrhage has at the same time been discovered in some one part of the cerebrum; and this is perhaps one of the principal reasons why apoplexy of the former organ is so little known, why we are so imperfectly acquainted with the history and symptoms of hemorrhage of the cerebellum.

*The Appearance of the Effused Blood*

varies much, according as we have occasion to examine it at a period more or less removed from the instant of its effusion. In recent cases, the blood is generally of a blackish colour and liquid consistence; at a later period, it resembles currant jelly, surrounded by some blood still quite fluid. Still later it becomes more solid, yellowish, or whitish, and at length loses entirely its normal colour and appearance. If we seek

*The Source of the Hemorrhage,*

the part from which the hemorrhage takes place, we find two different sources. 1st. In some cases it is effused from the capillary vessels, and on examination we are unable to determine the exact point whence it has proceeded. 2nd. A vessel of some magnitude may have been ruptured, and given rise to the effusion. In this latter case, we can frequently discover the injured vessel on the surface of the apoplectic cavity, but it is right to warn you that in some other cases the ruptured artery has been found very far from the neighbourhood of the effusion, with which it is connected by a pedicle that might easily escape notice.

*The Blood once Extravasated from its Vessels, what becomes of it?*

This is a question of some interest in the history of apoplexy. It may remain unchanged until the death of the patient, or, under other circumstances, it may gradually diminish, and eventually become absorbed. In this latter case nature performs an extraordinary and beautiful operation, which commences with the removal of the effused blood, and terminates in the cure of the patient. We have already noticed the changes that take place in the blood contained in an apoplectic cavity. At first dark and fluid, it gradually loses its colour and consistence, from the absorption of the more fluid parts. At length we find that nature has prepared an apparatus for its more complete removal. The coagulum is now contained in a round or irregular cavity, whose parietes are lined by condensed cellular membrane, forming a yellowish cyst, very analogous to a serous cyst. This cyst secretes a kind of serous fluid, whose use appears to be to penetrate the coagulum, separate the different parts of the blood, and render it more easily absorbed. Still later, upon examining the cyst, we find nothing but serum or a gelatinous fluid in its cavity. The parietes are connected together by a number of fibrous bridles that pass from one side to another, and intercross in various directions. The effused blood is now completely absorbed, but nature does not rest here; she now commences the task of removing the cyst; and the latter having enjoyed for a certain time its provisional existence, is gradually effaced, until no trace remains of the original accident, except a simple linear cicatrix, or a cicatrix with puckering and depression of the cerebral substance.

It was only within the last few years that the series of transformations we have now briefly described were followed up, in a connected manner, by Messrs. Rioné, Rochoux, and others, although the possibility of linear cicatrization in the brain was known, and the process alluded to, two centuries ago,

A modern author, M. Foville, has distinguished two ways in which the blood may be affected with regard to the nervous substance. He has sought to establish two forms of cerebral hemorrhage. In one there is laceration of the brain, with a greater or less loss of substance. In the other, the cerebral pulp is not injured; the blood is simply effused between two layers of the cerebral fibres. In the first case, accompanied by laceration, where the nervous substance is completely broken down, we may ask ourselves if the nervous pulp can be so far reproduced as to transmit volition &c. through the injured part. Dr. Foville thinks not. But the possibility of such a regeneration seems established by the experiments of M. Serres. Besides, do we not know that a divided nerve may unite, and continue to transmit nervous influence as before the injury took place?

*Period when Cicatrization is completed.*

We cannot lay down any fixed rules upon this point: the time varies considerably in different cases; sometimes the process of cure is very rapid, at other times it is tediously prolonged. In some cases, after a lapse of five or six months from the first appearance of cerebral symptoms, we find that the coagulum has been removed, and nothing remains but a trace of cicatrix: in other cases, on the contrary, the serous cyst of which we have spoken has been found many years after the occurrence of the original accident.

We have hitherto been occupied with the contents of the apoplectic cell, and the manner of its removal. Let us now examine the

*State of the Brain in the immediate vicinity of the Effused Blood.*

The vessels may present nothing particular, or have undergone an important modification which it is necessary to mention. In several cases of cerebral hemorrhage we find the vessels ossified in a high degree, or so friable, that the least effort is sufficient to rupture their parietes; and you know that in aged persons, who are peculiarly subject to sanguineous effusion of the brain, this state of the vessels is very common. The vessel may give way on the wall of the apoplectic cell, or at a certain distance from it, and in that case the hemorrhage may result from the rupture of a great vessel on the surface, or at the base, of the brain. M. Serres has seen a case produced by the rupture of the basilar artery, not far from its bifurcation: the blood here made its way into the ventricles. The nervous pulp itself may present certain alterations in or around the apoplectic cell. It may be absent, or we may find it broken down, lacerated, and presenting no other trace of organization than some shreds of vascular tissue. Now we may ask, Did this ramollissement precede, or was it subsequent to, the hemorrhage of the brain? I am inclined to think that in a great many cases the effusion of blood is preceded by a certain degree of softening of the nervous pulp. The proof is this,—in many cases we can follow, in the softened portion of the brain, all the degrees by which a simple injection of blood is transformed into a more or less extensive effusion: we see the latter commence by a number of small red points, which gradually unite, multiply, and enlarge, to form, in some other portion of the softened mass, a true apoplectic coagulum. However, we should distinguish this species of ramollissement from others of a decidedly inflammatory origin.

Let us now examine the state of the nervous tissue around the seat of the hemorrhage. In some cases the cerebral substance immediately around the cell may be in its normal state, but this is rare; in others the pulp is more or less coloured and injected, and bears marks of having been the seat of irritation: in other cases, again, the coloration of the nervous pulp seems to depend entirely on imbibition of the blood: the parts surrounding the coagulum are the seat of a true ecchymosis; hence it may present a great variety of colours, bright red, red, pale, yellow, &c., according to the vicinity of the cell; in a word, the cerebral substance may present all the shades of coloration which we observe in ecchymosis of other parts of the body.

The nervous tissue surrounding the effusion may be in a state of true ramollissement. This change, as M. Lallemand has demonstrated, may take place before the effusion, or it may succeed it, and then give rise to quite another order of symptoms. When the effusion is recent, the nervous substance around it may present several modifications: it may, as we have just remarked, be more or less softened; it may be infiltrated with purulent matter: finally, in some cases, we find a very considerable induration, which many authors attribute to chronic inflammation, in the immediate vicinity of the apoplectic cell.

Let us now leave the environs of the effusion, and consider the

*State of the Cerebral Mass in general.*

We frequently find in the brain, marks of very considerable congestion, and this is a circumstance of importance to observe, for many of the subsequent symptoms depend more upon the degree of hyperemia which thus occupies the nervous centre, than on the actual hemorrhage itself. As the work of cicatrization goes on after the absorption of the coagulum, this congestion may be repeated at uncertain intervals, and it requires the utmost care and watchfulness on the part of the physician. When very considerable hemorrhage has taken place into the substance of the brain, the opposite

hemisphere to that affected may also become compressed, and that in two different ways. 1st. By the congestion of one hemisphere, giving rise to an increased bulk, and acting directly upon the other, which it compresses. 2nd. By the passage of blood through the lacerated central parts, from one hemisphere to the other. These circumstances have an influence on the appreciation of the signs of cerebral hemorrhage, and are therefore not to be neglected.

Now let us inquire in what state do we find the membranes? They may remain altogether intact, or be infiltrated in a greater or less degree with blood, serum, &c., and thus become a source of complication of the symptoms. When the hemorrhage is of long standing, the membranes may exhibit other lesions connected with the duration of the primary affection. Thus the pia mater covering the convexity of the brain, may be infiltrated with serosity: or we may find a very considerable quantity of serum in the ventricles: this latter is a case which we sometimes meet with in practice. A patient has been attacked, perhaps several years ago, with apoplexy: the first symptoms pass off, but a new set is slowly developed. You now recognise chronic hydrocephalus. The patient dies, and on the autopsy you find, together with the traces of an ancient effusion of blood, a considerable quantity of serous fluid in the ventricles of the brain. We have now to occupy ourselves with

*Causes and Times of Cerebral Hemorrhage.*

But here our task is short. They are the same as for cerebral congestion; the only differences depend upon different degrees of intensity, and varieties connected with individual peculiarities. We shall therefore refer you to what has been said during the lecture on congestion, merely adding now and then a supplementary remark. You remember that we studied at some length the influence of temperature on the development of cerebral congestion. We have made a similar statistical investigation for hemorrhage of the nervous centre, and found that it is more common in winter than during any other season of the year. Thus of 177 cases which we examined with this view, we found that 60 occurred in winter, 42 in spring, 40 in autumn, and only 35 in summer. You see, then, that the disproportion between summer and winter is very considerable.

We have also asked ourselves whether cerebral hemorrhage is not more common at certain periods than at others: we cannot doubt this. From a statistical calculation made in London by HEBERDEN, it would follow that during the 17th century apoplexies went on gradually increasing from the commencement of the century to the middle; acquired greater intensity after that period; and became more and more frequent towards the end, when they had attained their maximum. A similar calculation was made in Paris, during the same time, on a very large number of cases, and gave an exactly similar result: the number of cases towards the end of the century exceeded that observed towards its commencement, in a very remarkable manner. Here you see an example of what we stated in our introductory lecture, that diseases of the nervous system are influenced by the different circumstances under which man is placed in society at different periods. What we have just said establishes the greater frequency of cerebral hemorrhage in latter times than at a period not so very far removed from the present. We have now to consider the

*Influence of External Agents in its Production.*

With respect to this point we have little to add to what has been already said in the lecture on congestion. We shall only subjoin, by way of supplement, that the abuse of spirituous liquors, and the frequent administration of narcotics, are often causes of cerebral hemorrhage, as well as of congestion. Another question is the following: What influence do the different states of the nervous centres exercise in the production of cerebral hemorrhage? May they be regarded as an exciting cause? Certainly, different acts of the brain, such as powerful emotions, violent passion, excessive bodily pain, acting upon the central nervous organ,—all these may produce apoplexy. However, we shall add, that simple congestion, and its symptoms, without effusion, are more frequently the effect of the causes just mentioned, than actual hemorrhage into the nervous substance.

*The Influence of the Digestive Organs in the Production of Cerebral Hemorrhage*

is the next point we have to consider; but here we can only repeat a remark which we have just made; derangements of nutrition act in the same way for hemorrhage as for congestion; they may become a cause of either disease; however, they rarely produce actual effusion of blood in the brain, unless the individual has been predisposed to this accident by an original peculiarity of constitution. We have next to examine the

*Influence of the Circulation.*

Some authors have endeavoured to show that any considerable diminution of the caliber of the aortic arch cannot take place without exercising a corresponding influence on the brain, and favouring the development of apoplexy. This is possible, but I do not know that it has been established in any thing like a positive manner. We are not without examples in the science, of the more or less complete obli-

teration of the great vessels of the heart. We have, indeed, a certain number of cases in which the arch of the aorta was completely obliterated below the point from which the great cephalic arteries are given off. The records of medicine furnish us with four authentic cases. Now out of these four we find only one, a single one, of a corresponding influence having been exercised on the brain; it is that published by Dr. Rennau, of an individual, ninety-two years of age, who died presenting the symptoms of hemiplegia of the right side of the body. On examination of the body after death, traces were found of an old effusion into the substance of the hemispheres, and the arch of the aorta was found completely obliterated below the origin of the left subclavian artery. This is the only case we are acquainted with showing the connection between an apoplectic attack and diseases of the aortic arch, by which its caliber is diminished. In the three other cases of this kind nothing similar occurred: the brain remained intact, notwithstanding the existence of an organic change by which we might naturally suppose that a great quantity of blood would be determined to the organ. Cruveilhier mentions a case in which the carotid arteries were nearly completely obliterated, and where, of course, the impulse of the circulation in the brain was greatly diminished; yet the patient died of apoplexy. This case destroys the influence of the fact we have just noticed, and, on the whole, it may not be too much to say that the part hitherto attributed by writers to diminution of the aortic caliber in the development of apoplexy, has been excessively exaggerated.

As to the influence of any changes that may take place in the venous circulation, we have nothing new to add to what has been already said on congestion. The causes of the one act equally in the production of the other, though perhaps with a less degree of intensity. It is not often that we see cerebral hemorrhage produced by a simple interruption in the venous circulation, although, as we have had occasion to remark at another time, that the latter cause frequently produces a greater or less degree of congestion. This fact has been submitted to the test of experience. Several physiologists have endeavoured to determine how far a sudden interruption of the venous circulation from the head may influence the development of apoplexy: they have tied the veins which bring back the blood from the centre of the nervous system, but in most cases have not succeeded in giving rise to the expected accidents. The ligature of the great jugular veins has been performed without giving rise to any symptoms of apoplexy, or even of hemorrhage.

Has plethora of the constitution any influence in the production of cerebral hemorrhage? Certainly it is impossible to deny that individuals presenting the character of what is called the sanguineous temperament, are sometimes attacked with hemorrhage of the nervous centres: this is a fact that no practical physician can deny. However, we are compelled to observe that it gives rise more frequently to congestion than to effusion of blood in the brain. Perhaps the most correct point of view in which we can regard it is, as a predisposing cause. We have seen more than one case where the subsequent attack was long announced before its occurrence, – where the hemorrhage was predicated from the temperament of the patient, and the prophecy unfortunately fulfilled: in short, it is impossible to deny the connection between apoplexy and that state of the constitution in which the individual presents the character of having an excess of blood. However, in many other cases, the effusion of blood into the brain takes place in quite an opposite state. Many patients of a pale appearance and exsanguineous temperament, have been equally attacked by the disease now under consideration. Hence the absence of a plethoric temperament by no means guarantees against an attack of apoplexy. Indeed, a case has been published in which the patient was struck with cerebral hemorrhage at the very moment he had lost a large quantity of blood from another source; the state of general anemia was here unable to counteract the tendency to effusion in the brain, which took place at a time when we cannot certainly suppose any great impetus of blood towards the cerebral organ.

Some authors have spoken of the occurrence of hemorrhage in pregnant or lying-in women. They consider the act of accouchment, and the state which precedes it, as exciting causes of apoplexy; but the cases of cerebral hemorrhage during labour are rare, very rare; if there existed any real connection between apoplexy and labour, we should observe the former much more frequently than we do. The number of lying-in women is, as you know, immense; the cases of cerebral hemorrhage during accouchment are few; hence I think its occurrence at that period completely accidental, and not to be attributed to the state of the system in childbed. In some women the hemorrhage takes place within the first few days after accouchment; here, also, for the reasons which we have just given, we think the apoplexy is a mere coincidence.

*Is the Influence of the Sex felt in the Development of Cerebral Hemorrhage?*

Are males more subject to this disease than females, and if so, in what proportion? Joseph Frank used to say, "inter decem apoplecticos unam numerare soleo feminam." But this proportion is much exaggerated; apoplexy is a disease more frequently seen in females than you may be

led to expect from the aphorism of FRANK; indeed, any of you who have been in the habit of attending at *Salpetriere* must be already aware of this. JOHN PETER FRANK published a statistical account of 1241 cases of apoplexy observed at Vienna, in which the sex of each individual was noted. Of these 1241 cases, 637 occurred in persons of the male sex; the remaining 604 were females. Here, you see, is a great difference, from the result of JOSEPH FRANK's observations. A French physician, M. FABRET, has made a similar calculation on a larger scale: he has collected 2297 cases of cerebral hemorrhage, and found that 627 of the individuals so attacked were women. This proportion, again, differs sensibly from that of PETER JOHN FRANK, but is far from approaching the relation of one in ten, laid down by JOSEPH FRANK. The next point we have to examine is, the

*Influence of Age*

in the production of cerebral hemorrhage. Are apoplexies more frequent at an advanced period of life than at any other? Certainly so; the result of investigations made by M. ROCHOUX, and others, have placed this beyond any doubt, and show that after the age of 50 these hemorrhages become common, and acquire their maximum of frequency in a period between that and 70 years of age. In childhood and up to the period of 35, they are rarely observed. These results are perfectly in accordance with the aphorism of HIPPOCRATES, which indicates the greater frequency of cerebral hemorrhage at an advanced period of life. M. ROCHOUX, in particular, has occupied himself in the solution of this question. He has made a relevé of 61 cases, and found them distributed in the following order, viz. from 30 to 40 years of age, 10; from 40 to 50, 7; from 50 to 60, 13; from 60 to 70, 24: from 70 to 80, 12; finally, between the age of 80 and 90, he observed only a single case. The conclusions at which he arrives from the above numbers is, that the maximum of cases of apoplexy occurs in the fifteen years which are comprised between 55 and 70; that after this latter period the tendency to cerebral hemorrhage seems to diminish; and, finally, that it is equally rare before the age of 30 or 35 years. The rare occurrence of cerebral hemorrhage at the two extremities of life seems thus established; however, we are not without examples of apoplexy at a very early period of existence. I myself saw a young boy, thirteen years of age, who died rapidly under the symptoms of effusion of blood in the brain; after death I found an enormous coagulum in one of the hemispheres. M. BERNET gives the case of a child, four years of age, who died in a similar manner. SENN has published one that occurred in a child three months old; and, finally, M. BILLARD, in his work on the diseases of children, speaks of an infant who died in an apoplectic state three days after birth. On examining the body, an effusion of blood was found in the left hemisphere of the brain, near the corpora striata.

We shall continue the subject at our next meeting.

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## ST. THOMAS'S HOSPITAL.

### CLINICAL LECTURE

ON CASES OF

### *DISEASES OF THE JOINTS.*

*Delivered in the Session* 1835-6.

BY MR. TYRRELL.

### LECTURE II.—DISEASES OF THE KNEE-JOINT.

*Termination of former Cases of Disease of the Hip-Joint.*—At our last meeting, gentlemen, I detailed to you the history of four cases of disease affecting the fibrous capsule of the hip-joint, giving the progress of each case up to the date of the lecture, all of them, with the exception of one case, at that period being in the house. The third patient, a boy, had been presented cured at the time I delivered my remarks, and since then two of the other patients have likewise left the hospital. The patient in the second case, Septimus Carter, in whom the local disease was complicated with febrile symptoms, though not yet perfectly well, left the hospital by his own desire, that he might have the benefit of a better atmosphere than he could obtain here, as he resides at a short distance from town. He has now but very slight pain, either of the knee, or of the hip upon pressure in the groin; he can move about with tolerable freedom; in fact, his sufferings are hardly to be considered of any importance, and I am sure that by rest, and improvement of his general health, if he be not guilty of some imprudent act, he will gradually recover.

The fourth case was that of a woman in Queen's Ward; and in this instance I have not so favourable a report to make. She was twenty-six years of age, a housemaid, and the mischief had arisen in consequence of a severe blow from a fall. Although the report states that the secretions have been pretty regular, yet there has been something wrong, constitutionally, which has influenced the local complaint. Her general health does not appear now to be quite so good as when I last met you; and I think you will generally find that in proportion as the general health improves, or breaks down,

so will the local affection mend or retrograde. To-day she complains of pain in the hip upon pressure being made over the anterior part; but when pressure is applied over the posterior part, she feels a kind of soreness merely. The pain of the knee is not constant; it occurs at night, and upon pressure on the anterior parts. The uterine functions are regular. She has not a good appetite, though the secretions are good and regular. I have given her, in consequence of there being a diminution of the general powers, the mistura potassæ hydriodatis. We have applied a fresh moxa to the joint, and I trust at our next meeting I shall be able to give you a more gratifying report. However, so far as all these cases go, they show well the nature of disease of the fibrous capsule, and that the plan of treatment which has been resorted to is likely to be efficacious in the majority of such cases, three of the four cases having been cured, and the remaining case being nearly so.

I shall this morning direct your attention more particularly to cases of disease of the knee. I should have liked to pursue the subject of disease of the hip farther, had I had cases in the house to illustrate how disease affecting that joint attacks the synovial membrane, the capsule, and the cartilages, proceeding to abscess, destruction of the cartilages, and, occasionally, to dislocation; but having no such cases, and desiring to keep these clinical remarks as closely connected as possible with cases under our guidance at the time they are delivered, I shall proceed to speak to you of diseases of the knee.

CASE 1.—*Inflammation of the Synovial Membrane of the Knee-joint, with Increase of its Secretion.*—The first case I shall advert to is one of inflammation of the synovial membrane of the knee-joint, with an increase of secretion from inner surface of that membrane. It has occurred in Thomas Clarke, a carpenter, aged 23, of temperate habits, residing at Kennington. He was admitted into No. 8, Abraham's Ward, on the 22nd of October last. Upon his admission he stated that about twelve months ago, being in the habit of kneeling very much in his business, having been planing boards for floors, he observed a slight swelling of the right knee, unattended by pain, except on exposure to cold. The swelling gradually increased, and more particularly so upon taking much exercise. He had gonorrhœa about two years and a half ago, but the discharge had disappeared about a year and a half before the appearance of the present malady. My inquiries were directed to this point for a reason which I shall presently mention. Upon his admission he complained of occasional pain, increased at night, of a dull aching character, aggravated by motion of the joint, and pressure between the inner condyle and the patella, or between the internal lateral ligament and the patella; also upon pressure between the ligamentum patellæ and the external lateral ligament. The synovial capsule was distended, and puffed up with fluid, more particularly apparent in the parts I have described, and at each side of the tendon of the rectus. The general health was tolerably good. He was directed at that time to keep his bed, that the limb might be quiet, and a blister was applied to the surface.

On the 27th it says the pain is now of a sharp darting character, occurring at intervals only; and that it may be produced by pressure over, or by motion of, the joint. The swelling is much less. The blister healed under the application of a simple poultice, and another blister was directed to be applied.

31. Pain less, and he can move the joint without increasing the pain.

Nov. 4. Scarcely complains of any pain; swelling nearly gone; rests well at night; appetite good, and secretions regular.

11. No pain on pressure, or motion of the joint; swelling subsided; general health good; secretion regular; presented cured.

*Anatomical Structure of the Knee-joint.*—As all my remarks to-day will refer to mischief to the knee articulation, perhaps I may be excused in the outset in offering a few brief remarks on the anatomical structure of that part, as our diagnosis must depend a good deal upon examinations conducted on anatomical principles.

This articulation, then, admits of motion in two directions only,—flexion and extension, as they are commonly called; and, consequently, this joint is placed among the ginglymoid, or hinge-joints. The joint is formed principally between the lower part of the femur, and the upper part of the tibia, with an interposition of fibro-cartilaginous bodies, which aid in forming the joint, and are termed the semilunar cartilages, from their figure. The motions of the joint are restricted principally by bands of fibres termed ligaments—a very strong one on the inner, and two on the outer part; and these are termed the internal and external lateral ligaments. We have, further, a portion of the tendon of the large rectus muscle proceeding from the thigh over the patella, improperly called the ligamentum patellæ, which should be regarded, however, as a continuation of the tendon of the rectus. This is placed more distant from the joint than any we have described, or have to notice, a quantity of fatty matter being placed between it and the synovial tissue. We have abduction, or a throwing of the leg outwards from the femur, prevented by the internal lateral ligament, and we have the motion of turning it inwards prevented by the external lateral ligament. We can

flex the leg to a considerable extent, but can only extend it to little more than a straight line with the thigh. The further extension is prevented by the posterior ligament of Winslow, which is considered by some as a continuance of the semi-membranosus, which contributes to form the inner ham-string. Besides, we have on the inside, two firm bands of ligament, proceeding from before and behind the rough protuberance of bone, on the middle of the articulating surface of the head of the tibia, to the condyles of the femur; and these are called the crucial ligaments, from their being placed across each other. These ligaments perhaps assist in preventing extension of the leg beyond a certain degree, but they will very much prevent rotation of the condyles on the head of the tibia; that is to say, if you attempt to twist the thigh inwards or outwards from the leg, the anterior and posterior crucial ligaments, aided by the other ligaments I have enumerated, will restrict such motions. These are the principal ligaments for the protection and limitation of the motions of this joint; there are some others, but their importance scarcely requires us to occupy our time in adverting to them; nor is it necessary that I should describe to you at present the small ligaments which connect the semilunar cartilages, for they are out of reach when we are called upon to examine the joint.

Now the synovial membrane is within all these ligaments. It covers the articular extremities of the bones, and passes some distance up in front of the thigh-bone, beneath the tendon of the rectus or quadruceps muscle. There is a little interruption, however, to the strict continuity of the surface of the synovial membrane; that is to say, it does not form a perfect sac, because of the attachment of the little process termed the ligamentum mucosum, which proceeds behind the ligamentum patellæ to the condyles, just in the same way as you have the ligamentum teres proceeding from the hip-joint, to be attached to the femur, although nothing like so strong a ligament.

You will find, then, that there are ligaments on the inner, the front, the outer, and the posterior sides of the knee-joint, and that the synovial membrane is necessarily more exposed between any of those particular spots, than where it is covered by the ligaments; this is the case more especially on the anterior part of the joint, where no muscles pass over it, so as to assist in protecting the membrane. In many of the books which treat of the ligaments and articulations, there is no mention made of the fibrous capsule of this joint; but, in strictness, there certainly is a fibrous capsule covering the articulation, although not so distinct or so defined as that of the hip-joint. Thus we have a fibrous expansion, connected with the synovial membrane, between the respective ligaments which I have described. It is only where there is a greater assemblage of fibrous bands, and where these are more distinct, that they have been divided into separate portions, under the name of "ligaments."

*Diagnosis of the foregoing Case.*—Well, now, I have mentioned that in the case before us there is inflammation of the synovial membrane, with increased secretion of synovia. How is this distinguished from any other disease? Perhaps when I have related some other affections of the joint, you may understand it better; but, in the first place, I may state that the mere swelling, and the shape of the swelling, were sufficient to satisfy me that it was the disease which I have described, and that it was within, and not external to, the capsule. The swelling appeared on either side of the tendon of the rectus, and a little likewise at the side of the ligamentum patellæ. There is no particular enlargement corresponding to the situation of any of the ligaments. The joint, when examined by touch, gives an impression of elasticity, indicating that the tumefaction arises from the presence of fluid, rather than from solid deposit; and we come at once, therefore, to a knowledge of the disease. But on going into the history of the case, we find that it has been produced by injury. Injury is a great deal more likely to produce disease of the fibrous tissue than of the synovial membrane. The patient has pain, and that pain is increased at night. Now when we look at the intimate connection which exists betweeen the fibrous and the synovial membranes, we cannot wonder that the one should participate in the diseases of the other. It is very rarely, therefore, that we have isolated affection of one of those membranes. We are much more likely to have isolated affection of the fibrous than of the synovial membrane; because the vessels supplying the synovial membrane, pass to it from the fibrous membrane, therefore when disease is set up in the synovial membrane, it extends rapidly to the fibrous capsule. Just so should we find it in the case of inflammation of the dura mater. Seldom does it happen that we have inflammation of the dura mater, without the inflammation extending to the lining membrane. So, again, in pericarditis, the inflammation of the pericardium extends to the serous membrane, and terminates in adhesive deposit. Besides, as to the nature of this swelling, I found that the patient did not suffer much pain when I made pressure over the ligaments, but when I came to make pressure over the parts where the synovial membrane is much exposed, the pain was considerable, and that was an additional reason to satisfy my mind of the nature of the disease.

This is not a very common affection,

either as an idiopathic disease, or as the result of injury, for injury more frequently produces affection of the fibrous structure. I was therefore induced to inquire into the probability of there being any specific cause of the affection; for the disease, as we very well know, which is generally called "gonorrhœal rheumatism," affects particularly the synovial membrane of articulations. I have been consulted lately upon a case very illustrative of this kind. A gentleman has been for some years the subject of disease of the urethra; and in spite of all he has suffered, he will go on subjecting himself to fresh attacks of disease, and almost as often as he is imprudent, so often has he gonorrhœa. As soon as the inflammation is set up, and almost as soon as the purulent discharge is established, he has affection of the different articulations; the synovial membranes become inflamed, they pour out secretions, and the joints become tumid, just as in the case before us. So that this disease, you will observe, is frequently connected with a gonorrhœal, or what we may call, if you please, a venereal taint. I therefore made inquiries in the present instance, and proceeded to examine the urethra, to ascertain if there was stricture; and at last, being satisfied upon all these points, and that the disease originated from pressure, and not from any specific influence of this sort, the treatment became simple; mere rest, with counter-irritation, having at once annihilated the disease. A couple of blisters were applied, he recovered the power of motion, without suffering, and was enabled to quit the hospital, in ten days or a fortnight, perfectly well.

Case 2.—*Inflammation of the Synovial Membrane of the Knee-joint, with deficiency in its Secretion.*—We have another case, where there is inflammation of the synovial membrane, with a *deficient* secretion of the synovia, there being an increase of the secretion in the last case. Elizabeth Herring, ætat. 14, a housemaid, was admitted on the 19th of the present month into No. 7, Lydia's Ward. She states that about a month ago, after kneeling, a swelling formed over the ligamentum patellæ. Probably she had the disease called the "ganglion patellæ." The swelling was attended with much pain; and the joint became more painful towards night. Motion produced rather severe pain. Leeches had been applied previous to her admission, without any benefit whatever; she had been going on in the discharge of her duties as a servant during their application. Upon her admission she complained of sharp darting pain on the inner side of the knee. Pressure on the inner or outer condyle produced severe pain. Any motion of the joint was attended with crepitus, and an aggravation of her sufferings. Over the ligamentum patellæ there was a slight swelling, which was painful. Her general health was tolerable; she rested well at night, except when disturbed by the pain, which was always worse then. She was put to rest, and had a blister applied to the knee, and afterwards a poultice.

The report of to-day is, that the pain in the joint is less; she has rested better these last two nights, and the swelling upon the ligamentum patellæ is diminished. There is some slight crepitus still on moving the patella upon the condyles of the femur.

Whether there be any peculiarity in the form of the inflammation which gives rise, in the one case, to an *increase* of the synovial secretion, and to a *deficiency* of it in the other, it may be difficult to say. The same membrane is affected in both instances; there appears from the sufferings of the patients to be inflammatory action going on in both, and both are to be regulated on the same principles. This case has been for so short a period under our notice, that we are hardly able yet to ascertain what will be the ultimate result; but I have no doubt, from experience, having seen many such cases, that it will proceed just as favourably to a cure as the one of which I last spoke.

*Other Affections of the Knee-joint.*—I have brought these different and somewhat opposite cases forward, to enable you the better to comprehend the points of diagnosis which I have described; and I shall now proceed to the description of two other forms of affection of the knee, which are more rare, and perhaps more difficult to treat.

Besides the structures I have mentioned as contributing to the formation of the joints,—the ligaments, the synovial membrane, and the fibrous tissue,—we have the osseous extremities, which are tipped or covered with cartilages, the cartilages being lined with the synovial membrane. Now the ends of the bones, especially the cylindrical bones, which contribute so greatly to the support of the body, are enlarged. If the extremities of the femur, for instance, were not of greater diameter than that of the rest of the bone, they would be constantly liable to displacement, but Providence, wise in all its works, has, in the formation of the joints, increased the diameter of the ends of these bones; their bodies are of great compactness, and sufficient, under ordinary circumstances, to resist injury, whilst the extremities are exceedingly light, formed of what is called "cancellated structure;" that is, small laminæ of bone, intersecting each other, and forming cells, which are lined with membrane, and which probably afford the secretion that we find in the cells of the cancellated structure. This part of the bone also is liable to inflammatory action, which may affect the power of the articulations, and may, indeed, eventually

lead to as serious results as happen from any disease attacking the articulating surfaces themselves.

Case 3.—*Inflammation of the Osseous Structure of the Tibial portion of the Knee-joint.*—The first is the case of Thomas Lynch, aged 21, living near the Tower, by occupation a footman, and of steady habits. He was admitted into No. 8, Abraham's Ward, on the 27th of August last. He states that about a month previous to his admission, after taking much exercise, he experienced a dull aching pain of the right knee, which increased towards evening, and disturbed his rest greatly. Exercise of the joint increased his sufferings. Two small blisters were applied to the knee, but without affording much benefit. Upon his admission he complained of pain on the inner side of the right knee, particularly at night. At the lower part of the joint, the inner side of the head of the tibia was found to be much enlarged; and upon his placing the foot on the ground, and resting his body on the limb, the pain was increased. He had rheumatic pains in different parts of the body, and his general health was impaired. To procure rest and regulate the secretions, I ordered that he should take a grain of the sub-muriate of mercury, with half a grain of opium, and a blister was to be applied to the knee. By these means he rested, and the pain was somewhat relieved. In the beginning of October, the first blister having healed, a second was ordered, and, the secretions being regular, he was ordered to take the tonic mixture,—the mistura potassæ hydriodatis. This is a tonic mixture which I frequently give, not only in such affections as these, but in others, and with great advantage. It contains a sixteenth part of a grain of iodine, four grains of the hydriodate of potass, and a small quantity of sirup of poppies, with a little distilled water, to each dose. The mixture is made of half a grain of iodine, half a drachm of the hydriodate of potass, half an ounce of the sirup of poppies, and half a pint of distilled water; and the patient takes an eighth of this mixture for a dose.

Oct. 16. He had now no pain on motion. The affected limb was rather smaller than the other, for a reason which you will recollect I explained to you at the last lecture,—namely, that where there is disease, and the muscles are not kept in exercise, they lose their contractile power, and become flabby. He now slept well at night; and I ordered him to rub in, over the affected part, night and morning, the unguentum potassæ hydriodatis, – an ointment made with a drachm of the potassæ hydriodatis to an ounce of lard.

21. Much the same; joint rather diminished in size.

27. Pain gone; can walk without any inconvenience; the joint remains a little enlarged, and he was presented well.

Case 4.—*Inflammation of the Osseous Structure of the Femoral Portion of the Knee-joint.*—The next case is one of inflammation of the cellular structure of the condyles of the right femur. Mary Sullivan, aged 32, residing in Bermondsey, a married woman, of scrofulous diathesis, was admitted into No. 10, Lydia's Ward, on the 19th of November. She states that about seven months ago she received a blow on the right knee, from a fall, which produced considerable pain, but no swelling. The pain continued more or less severe until about four months since, when the joint began to swell, and the pain to increase. She then applied at a dispensary, and was cupped and repeatedly blistered, which, to a certain degree, relieved the pain, but the swelling still continued to increase. In a short time afterwards the limb became very large, and the pain returned with considerable severity. From a continuance of blistering, and the internal use of the sulphate of quinine, the symptoms again subsided, and she discontinued her attendance at the dispensary. About two months ago, the joint, still remaining swelled, became yet more enlarged and sometimes painful, although, until about a fortnight since, she did not experience much inconvenience, with the exception of stiffness of the joint, and pain upon continued motion. At this period she unfortunately struck the knee again, when the pain returned with violence, and has continued violent ever since. At the period of her admission, she complained of a dull aching pain over the whole of the joint, which was particularly severe at night. The motions of the joint, which are very limited, increase the pain, which is more particularly referred to the inner side of the knee—to the situation of the internal lateral ligament, pressure over which aggravates the pain. The condyles of the femur are greatly enlarged, and the patella appears to be sunk down and impacted between them. The general health was good, the appetite was good, and all the secretions were natural. Her general powers, however, are very much below par. She was ordered to have the house-medicine, and the same form of tonic as that which the last patient took,—the mistura potassæ hydriodatis; but instead of mixing it with water, as a vehicle, she was to take it in the decoction of sarsaparilla. She was likewise directed to have a blister applied over the surface of the knee.

24. She states that she is better. She says that the pain is less, though still severe at night. The tenderness on the inner part of the joint is less. There is not so much pain complained of on grasping the femur above the condyles.

*Remarks on the Cases.*—Now these are ra-

ther rare affections; they are, however, more frequent, perhaps, as affecting the articular extremities of the bones which assist in the formation of the knee, than in the articular extremities of any others. Still, I have seen the same disease affecting the elbow-joint, and the lower extremity of the tibia, the ulna, and the radius. It appears principally to arise in persons of scrofulous habit.

*Diagnosis and Pathology.*—From the histories of the cases, you must see that there might be difficulty in discriminating between the disease of the cellular structure of the extremities of the bones, and that of the synovial membrane. There is a dull aching pain, which is increased at night, indicating an affection of the fibrous structure; but on examining the joint you easily ascertain the seat of the disease. You find, probably, that the patient, as in the instances before us, complains somewhat of pain, aggravated upon pressure over one of the lateral ligaments. The reason is obvious. The articular extremity of the bone cannot be enlarged without separating in some degree the attachments of the lateral ligament, and thus putting the ligament upon a stretch which may induce a slight degree of inflammation. But the very figure of the joint will strike you as peculiar, and guide you to the *rationale* of the disease. When the patient is the subject of disease of the synovial membrane, with deficient secretion, he cannot have the joint moved without pain, because the synovia that naturally exists between the opposite surfaces of the bones is wanting, and they grate against each other, producing excessive suffering. Now in the instances of enlargement of the articular extremity of the bone, I have known patients only complain of difficulty of motion, or of pain, when the limb was moved, from what they themselves called "a deficiency of the joint oil," meaning synovia; but in examining the joint I have found the patella move freely on the condyloid surfaces of the femur, proving that the synovia was not deficient. How is the difficulty of motion of the joint, then, to be accounted for? Why in this way, from the articular surfaces having become altered, in consequence of enlargement, and the deformity thus produced. This is beautifully seen in the case of Mary Sullivan. The disease in her case affected the condyles of the femur; the extremity of the tibia remained as before, but the condyles were enlarged, the patella having sunk down between them, and there become impacted; so that even if she were to recover from the disease, I do not think that she would ever again have the proper motions of the joint. It is, then, from somewhat negative symptoms, with an accurate examination, and a comparison of the sizes of the joints, and of the extremities of the bones, that you have to form a perfect diagnosis.

You thus have all the symptoms explained. Sometimes, when disease of this structure has proceeded for a time, you have the periosteum of the bone becoming inflamed, and in consequence of its being expanded over the whole of the osseous substance, the suffering is extreme when it is pressed upon, just as you have pain in what is called "hydrothalmia," affecting the sclerotic coat of the eye. When that texture is pressed upon, it becomes inflamed, and is extremely painful. Of course the pain is less, in some degree, where the inflammation of the cancellated structure is slow: the only symptom of the disease then, is difficulty of motion. Where the texture is so delicate as the lining of the cancellated structure necessarily is, and when the inflammation which attacks it is slow, the disease is hardly evinced; but when the affection comes on rapidly, you then find, from the enlargement of the bone, and the implication of the membranes connected with it, that the character of the disease is much more decided, and can at once say that it is an affection of the fibrous tissue.

*Prognosis.*—What is the prognosis? In an instance where the disease has been of slow origin, and of slow progress, it is not likely that the patient will suffer eventually, if proper care be taken, any further than from the irregularity of the joint, and difficulty of motion. Where once enlargement of osseous structure has taken place, you cannot diminish that extent of surface again by any treatment short of operative proceedings. In the first case the patient recovered under the treatment adopted. The size of the joint somewhat diminished, and he was able to walk. Why was this? The head of the tibia was affected; there was a deposit taking place in the osseous structure, the outer shell of the bone gave way, and the periosteum became affected and thickened. You can get the thickening of the fibrous texture of the periosteum reduced, but you cannot get rid of the thickening of the bone; it will remain so during life. In the other case, where there has been much more severity of disease, we shall have much more difficulty of cure. That patient has a scrofulous habit, and weak general powers, which are all favourable to the progress of the local affection. If she can only bear up under the confinement of the hospital, and the atmosphere which she will have to inhale here, I have no doubt that we shall be able to arrest the disease, and to send her forth with the use of the limb; but supposing the atmosphere, and the confinement of the house, do not agree with her, and her general health suffers, it will be prudent to discharge her, in order that she may have the benefit of better air, as detaining her here may cause her to have the more severe form of the disease.

What, gentlemen, will be the progress of

the disease if we do not arrest it? I presume, from the history, that there is a deposition of that curdy sort of matter, which, in scrofulous persons, we see deposited in instances of enlarged glands of the neck, filling, in great measure, the cancellated structure of the bone. If we could cut through the condyles of the femur, and expose the cells, we should probably see some of them broken down, and filled with this substance. But if the disease goes on still further, you will have less of this curdy matter, and in its place a fluid generated, consisting of that serous or indifferent sort of pus which we know to be the result of scrofulous inflammation. When this pus is formed, it will begin to make its escape by ulceration; the cellular structure will be broken down, the denser compact shell of the bone will gradually give way, the cartilages will ulcerate, and we shall have sinuses formed, from the interior of the bone, through which the discharge will take place. Very likely, however, before all this occurs in an hospital, the general health gives way, and we are obliged, with a view to save life, to get rid of the disease by amputation.

*Treatment.*—The object, however, is to avoid the resort to amputation; and I have, therefore, with a view to preserve the general health in such cases, given such medicine as is calculated to lessen the peculiar disposition to the disease which is termed "scrofulous diathesis." Iodine has a remarkable effect in this respect; and I have combined it with sarsaparilla, which is often necessary. We have also employed the milder forms of counter-irritation; but if we find that a decided improvement does not take place under blistering, we resort immediately, as I shall do in this case, to the more powerful means of moxæ, or issues, of which I spoke in my last lecture.

These cases are well worth watching. Instances of the kind are not often seen, but when once seen, and well examined, I do not think you would make a mistake between them and any other affection of the joint. Without knowing such cases, and being aware of them when they exist, you might mistake them for an affection of the synovial membrane, or of the fibrous tissue, and be led to give a prognosis which you could not afterwards verify, and which would be calculated to bring discredit upon you.

In all these cases the utmost you can do is to arrest the inflammation, and put the parts into a healthy condition. You cannot produce an alteration again in the figure or diameter of the bone, which will restore its integrity, and render the joint as fit for the purpose of motion as it previously was. A lameness must always ensue where such an affection has taken place, and has given rise to enlargement of the bone.

Other cases we have under treatment, but I shall not to-day describe them. There are several cases in which ulceration of the cartilages and destruction of the ligaments have occurred. One or two of these I have now under treatment, and they will contribute to form subjects of consideration at our next meeting.

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## CASE,

PRESUMED TO BE ONE OF

## MECHANICAL OBSTRUCTION

TO THE

## PASSAGE OF THE BLOOD IN THE ARTERIES.

*To the Editor of* THE LANCET.

SIR,—The following case (a *part* of which I read at the *London Medical Society* in February last) I think you will consider worthy of insertion in your valuable Journal. I am, Sir, your obedient servant,

EDWARDS CRISP.

Walworth Road, Dec. 21, 1835.

CASE.—Jan. 31, 1835. I was requested to visit Mary C., ætat. 22, of healthy parents, residing at Camberwell. She had cholera in March 1831, and says that "her mouth was slightly affected by mercury, but she speedily recovered." I attended her two years since, during a severe attack of pneumonia, after which she had occasional cough, &c., for some time. She has been at service for ten or twelve years, and generally, during that period, was able to follow her employment, but she was occasionally prevented from doing so by headache and hysteria. For the last three or four days she has complained of pain in the legs and arms, with rigors, followed by heat of skin, &c. This morning there is pain in the epigastric region, rather increased on pressure. Pulse small, 90; tongue white, tip red; bowels confined. The menses have appeared regularly, but the discharge has been small in quantity.

R. *Mag. Sulph.* ℥i; *Liq. Ant. Tart.* ℥ss; *Aquæ* ℥vss. Ft. mist. cujus sumt. ¼ 4tis horis.

R. *Pilul. Hydrarg., Ext. Colocynth. C.*, aa. gr. v. Ft. pilulæ duæ, h. s. s.

Feb. 1. Less pain in the region of the stomach; the thighs and legs very painful; no redness or swelling, but the pain increased on pressure; pulse small and frequent; no sleep; bowels well relieved; motions offensive.

R. *Vini Colchici, Liq. Ant. Tart.*, aa. ℥ii; *Mist. Camph., Aquæ*, aa. ℥iii. Ft. mist. cujus sumt. ¼ 4tis horis.

R. *Pulv. Ipecac. C.* gr. x, h. s. s.

2. Much the same as yesterday; slept two or three hours; complains of great pain in the legs and thighs; no pain in the epigastric region; tongue red at the tip, with white base; pulse small, 90. The lower extremities ordered to be fomented with a hot decoction of poppy heads, and the following was prescribed:—

R. *Hyd. Sub., Pulv. Antimonialis, Pulv. Colchici*, aa. gr. vi. M. et divide in pulv. vi, quorum sumt. unum 4ta quaque hora.

3. Called this morning at one o'clock, and found her suffering from violent pain in the region of the stomach, increased on pressure; frequent vomiting (the first since her illness); no pain in the lower extremities; pulse very small; has fainted two or three times. Opened a vein in the arm, and with much difficulty obtained about ℥viii of blood, after which she expressed herself to be somewhat relieved.

Applicetur *Emplas Lyttæ* regioni epigastricæ, et *Emplas. Sinapis* pedibus.

R. *Haust. Sodæ Carb.* et *Acid. Tart.* 4tis horis in actis effervescentiæ.

Eight p.m. Pain less; pulse more expanded; blood cupped and buffed.

4. Has very little pain in the region of the stomach, but the legs and thighs are again excessively painful; no heat or redness, and the pain appears to be confined to the integuments; bowels relieved. Cont. medicina.

R. *Ext. Papav., Pulv. Rhei*, aa. gr. v; ft. pilulæ duæ, h. s. s.

5. Fainted once in the night; no sleep; hands and arms cold, with a tingling sensation in the fingers, succeeded by acute pain in the integuments of the arms; pain absent in the legs and thighs, and very slight (on pressure) in the epigastric region; tongue furred, tip and edges red; bowels open; *no pulsation at either of the wrists*; the heart and carotids pulsating with great violence.

Rept. medicina efferves., et sumt. *Pulv. Opii* gr. i hora somni.

8. Has remained much in the same state since the last report; very little sleep; pain in the arms and legs excruciating, but seldom occurring in both at the same time; slight tenderness in the epigastrium; no vomiting; sounds of the heart rather louder than natural; respiratory murmur distinct in both lungs. The menses appeared on the 4th Feb. and ceased to-day. Says she "observed no change in the symptoms during their continuance." *Pulsation absent at both wrists since the 5th.* Has continued the effervescing draughts, with a grain of opium and ipecacuanha, morning and evening.

R. *Ammon. Carb.* ℥ss; *Tinct. Opii* gtts. xx; *Mist. Camph.* ℥vi; ft. mist. cujus sumt. ¼ 4tis horis.

R. *Pulv. Ipecac. C.* gr. x, h. s. s.

9. Took the medicine only once, as it produced vomiting; pulsation ceases about an inch below each clavicle; the dorsal arteries of the feet pulsating forcibly, 90; the heart and carotids beating with less violence than yesterday.

R. *Haust. Efferves.* 4tis horis, et *Liq. Opii Sed.* gtts. xxv, h. s.

10. Symptoms the same as yesterday; no sleep for the last five or six days. Cont. haust. efferves., et sumt. haust. *Opii* h. s.

Feb. 11. Passed a restless night. Did not retain the opiate draught upon the stomach. The integuments of the right arm extremely painful. Met Dr. Whiting in consultation, who examined the arteries with great care, and found the pain much increased when pressure was made over the arteries of the upper extremities, particularly the right. Dr. W. ordered eight leeches to be applied below the right clavicle; a warm spirit lotion to the arm, with the following;—

R. *Hyd. Sub.* gr. j; *Ant. Tart.* gr. ½; ft. pilula 3tia quaque hora sumenda.

R. *Vini Colchici* gtts. x; *Mag. Sulph.* ℥j; *Aquæ* ℥x; ft. haust. ter die sumendus.

12. No sleep; pain in the right arm diminished; has been very faint since the leeches were applied; bowels moved twelve or fourteen times; motions fluid, yellow, and offensive. On pressing the spinous processes of the upper dorsal vertebræ, she complains of pain, but not more so than when the skin of the back is touched. Says her feet are cold and numb, and she has asked the attendants if the toes are not contracted. On examining the feet I found them quite warm. Rept. medicina, et adde, *Pulv. Ipecac. C.* gr. ii, singulis pilulis.

R. *Liq. Opii Sed.* gtts. xxv, h. s.

13. Slept four hours after taking the draught. Can move the arms without difficulty, but has still slight pain when pressure is made in the course of the arteries. The left foot and leg are extremely painful. On pinching the anterior part of the leg she is not sensible of pain, but complains of uneasiness when the back part is pressed. *No pulsation in the dorsal artery of the foot*, and rather indistinct in the popliteal; heat of the limb below the natural temperature; the carotids pulsating feebly, and on placing the finger upon them a thrilling sensation is communicated; "bruit de soufflet" observed for the first time over the region of the heart. Cont. medicina, et sumt. *Liq. Opii Sed.* gtts. xxx, h. s.

14. Believe I can distinguish a slight vibratory motion at intervals, in the left radial artery. The patient sleeps for five or six

hours; the right arm is again very painful; the gums are affected by the mercury. She has expressed a great desire for porter. Hitherto her diet has been farinaceous, with beef-tea and broth occasionally.

R. *Ammon. Carb.* ℈i; *Sodæ Carb.* ʒi; *Tinct. Aurant.* ʒii; *Aquæ* ʒvi; ft. mist. cujus sumt. ¼ in succo limonis 6tis horis.

Rept. haust. *Opii* hora somni.

15. Symptoms nearly the same as yesterday; no bellows sound over the heart; has taken ¾ of a pint of porter; ordered one pint daily. Cont. medicina.

16. Pain in the left foot and leg so severe that she is frequently screaming; no pulsation in the arteries of the upper extremities, nor in the left popliteal; tongue red and moist; skin often covered with perspiration. The porter to be continued.

R. Haust. *Sulph. Quininæ* gr. ii 4tis horis. Rept. haust. *Opii* h. s. Appl. *Emplast. Belladonnæ* cruri.

17. Foot and leg more painful since the plaster was applied: no pulsation in the left popliteal, but very distinct in the femoral; pain much increased when pressure is made in the course of the arteries; slight pulsation in the left brachial and radial arteries (beat synchronous with the heart). Dr. Whiting saw her again this afternoon, and recommended twelve leeches to be applied to the left groin; the foot to be fomented with hot spirits and water, and a large blister to be applied to the lower part of the abdomen. Dr. W. thought that by pursuing this plan of counter-irritation we might prevent the spreading of the disease to the larger arteries. The *Belladonna* plaster to be removed.

R. *Ammon. Carb.* gr. iii; *Quininæ Sulph.* gr. i; *Syrup. Simp.* ʒss.; *Aquæ* ʒx; R. ft. haust. ter quotidie sumendus.

R. *Liq. Opii Sed.* gtts. xxv, h. s. s.

18. Pulsation absent in both upper extremities, and ceases about three inches below Poupart's ligament in the left thigh; slept for a few minutes at intervals during the night; pain excessive; the foot and fore part of the leg of a purplish colour; the cutaneous veins distended with dark blood; the tips of the toes cold, and the foot rather below the natural standard; perspiration profuse over the upper part of the body; has been very faint since the leeches were applied; continues the porter; hot fomentations to the foot. Rept. haust. *Quininæ* et haust. *Opii* hora somni.

19. Foot purple and cold; pain increased; perspiration abundant in the night. Cont. medicina.

20. The foot is not swollen; temp. 84 F.; perspiration profuse; no sleep. Cont. medicina.

21. Pain more severe; slept three or four hours; temperature of the left foot 80 F. right foot and arm 92. Cont. medicina.

22. During the last two or three days she has complained of having pain in the right popliteal space; yesterday she felt pain and tenderness in the calf of the leg, and, at about eight p.m., a numbness in the foot, succeeded by intense pain, which has continued. On pressing along the course of the femoral artery, the pain is much aggravated; no pain when pressure is made on the outer and back part of the thigh; has also pain when the left femoral artery is pressed, but not so severe as it was on the 17th. *No pulsation in any of the arteries of the extremities.* The toes and sole of the left foot black; temperature 84; right foot 90. Ordered a blister to the outer part of the right thigh, and eight leeches to the foot.

R. *Pulv. Opii* gr. j; ft. pilula ter die sumenda. Rept. haust. *Liq. Opii Sed.* h. s.

23. Slept five or six hours; pain excruciating in both feet; fore part of the left, black; the instep and ankle red; temp. of the former 80; latter 91; feeble pulsation in the left radial and brachial arteries. Rept. *Pilul. Opii* et *haust. Opii* h. s.

24. Slept four or five hours; pain not so violent as yesterday; left foot much in the same state; temperature of the toes 60; ancle 68; right foot 81. Rept. medicina.

25. Pain less; several phlyctenæ on the left ancle; pulsation absent in all the extremities. Rept. med.

26. Symptoms the same as yesterday. Rept. med.

27. Feet very painful, especially the left, which looks rather better than on the 23rd; temp. of the sole 70; instep 83.

R. Haust. *Quininæ* 6tis horis.

R. Haust. *Liq. Opii Sed.* gtts. xl, h. s.

March 6. Since the last report the pain has been excessive; very little sleep; night perspirations; has complained occasionally of pain in the region of the heart; bruit de souffle very distinctly heard; suffered yesterday (for the first time since her illness) with pain in the right side of the head, which subsided after a few hours. Bowels have acted regularly; motions healthy. The fore part of the left foot in a state of sphacelus, with a red line of demarcation extending obliquely across. Has continued the opium and quinine daily. Ordered yeast poultices to the foot. Cont. medicina.

8. The little and great toes of the right foot black and painful. Rept. med.

16. Removed the phalanges of the two outer toes of the left foot, since which operation she has had less pain; slight pulsation in the left arm for the last four days; has taken port wine and porter daily, with the opium and quinine. Rep. med.

22. Pulsation absent in all the extremities since the 17th; bruit de souffle over the region of the heart; tongue scarlet and moist; secretions and excretions healthy. No extension of the gangrene on either of the feet. Rept. med.

28. Pulsation absent in the arteries of the limbs, but was perceptible in the left arm, from the 23rd to the 27th. Rept. med.

April 7. Pulsation ceases at about two inches below Poupart's ligament on both sides, and can be felt only at about half an inch below each clavicle; granulations abundant; since the 26th, has been able to take a mutton-chop daily, with port-wine and porter. Rept. med.

Oct. 1. Her health has gradually improved; the appetite is good; the tongue clean; secretions and excretions healthy. The menses appeared in June, and have continued monthly. During the last two months she has complained of giddiness and occasional pain in the head, with dimness of sight coming on towards evening, but she says that "her health is nearly as good as it was previous to this attack." The pain in the foot has been so intense, that for a considerable time she took six grains of opium daily. Notwithstanding this, the bowels acted regularly. She continued the quinine, with the compound iron mixture, until the 20th of June, since which time she has taken no medicine. The bellows-sound is sometimes heard over the region of the heart; feeble pulsation generally in the left brachial and radial arteries for the last three months; absent in the right arm since February. She says that "this is not so strong as the other, but that she is able to use her needle nearly all the day." Pulsation ceases at about two inches below Poupart's ligament in the left femoral artery; in the right it can be felt as low as the triceps. Has lost the first phalanx of the great and little toe of the right foot; all the phalanges, and three of the metacarpal bones of the left; the two remaining are partly exposed. A portion of the os calcis has exfoliated on each side; the foot is much inverted; the integuments are puffy, and painful on pressure. Is not able to keep the foot down for more than two or three minutes at a time, the pain being excessive, and the skin assuming a leaden hue; is very anxious to have the leg removed: the right foot and leg are generally cold.

5. With the concurrence and assistance of my friends Messrs. Bristowe, Bryant, Hughes, and Beane, I performed the circular operation, below the knee. On slackening the tourniquet, I found that there was very little bleeding from the large arteries, *the blood not coming per saltum*. The smaller vessels, however, bled profusely, and it was necessary to tie nine or ten of them; but little blood was lost, and she bore the operation remarkably well. Gave her 35 drops of laudanum. Examined the leg with great care. Slit up all the large arteries, but could find no trace of disease in them; they *appeared to be smaller than natural*. The veins and nerves also were healthy.

Nine p.m. Complains of great pain in the stump; pulse (left radial) quick; skin hot; thirst, &c.

R. *Mist. Effervesc.* 4tis horis.

6. Slept two hours; pain less; a little oozing of blood from the wound. Cont. medicina.

7. Symptoms the same as yesterday. Rept. med.

30. Has gone on well, with the exception of a little sloughing on the tibial side of the wound. The part, however, soon put on a healthy appearance, and is now nearly healed. The catamenia appeared on the 9th.

Dec. 21. A portion of the stump, of about the size of half-a-crown, not healed; the granulations pale, with sero-purulent discharge. Her health has improved since the last report, and she is able to get from one room to another with the assistance of crutches. The right foot is generally cold; pulsation the same as before the operation. Two gentlemen saw her on the 19th, and "thought they could distinguish feeble pulsation in the right brachial artery." I have not myself been able to detect it. The bellows-sound is often heard in the heart and large arteries.

*Remarks.*—The foregoing case, both in a physiological and pathological point of view, will, I think, be considered to be one of great interest. Opinions will, of course, vary as to the exact nature of the disease, but I imagine it will be generally admitted that there is mechanical obstruction to the passage of the blood, and that the train of symptoms described could not depend upon functional disturbance of the arteries. When I first mentioned the case at the *London Medical Society*, I suggested the probability of a metastasis of the integumental disease (which appeared somewhat of a rheumatic character) to the coats of the arteries, producing coagulation of the blood, and, probably, a deposit of lymph. This opinion is strengthened by the fact of the frequency of translations in rheumatic disease to the heart and pericardium. The case appears to me to confirm, in some measure, the correctness of Magendie's views with regard to the *non*-muscularity of the arteries. The result of the amputation proved that blood circulated through the larger vessels, but not in sufficient quantity to call their elasticity into play, and hence no pulsation was produced. I invariably found, when the carotids were greatly expanded, that the heart was beating violently, and that its

pulsations were synchronous with the artery. I also observed that when pulsation was absent in the left radial, the heart was acting feebly. The functions of the brain were scarcely disturbed, although the blood was sent through its vessels with great force. The profuse perspirations, confined principally to the head and trunk, evidently reduced the volume of the circulating fluid, and, after a time, allowed the vessels to assume their natural caliber.

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## CASE OF COXALGIA,

WITH

## LUXATION OF THE FEMUR, ANCHYLOSIS, PERFORATION OF THE ACETABULUM BY CARIES,

AND

## FATAL PERITONITIS.

*By* WILLIAM TAGERT, *Esq., Surgeon to Mercer's Hospital, Dublin.*

THE subject of the following case, John Tamor, a sailor, was admitted into *Mercer's Hospital*, in November 1834, where he remained until his death, comprising a period of ten months. As the principal points of interest were disclosed by the examination of the body after death, I shall curtail the history and symptoms of the case during the protracted residence of the patient in the hospital. He was admitted with a tumour in the upper and outer part of the thigh, at about the region of the tensor vaginæ femoris. The exact nature of this swelling could not be clearly ascertained at the time by an external examination, nor was it deemed prudent to explore it by puncture. The hip-joint and spinal column were carefully examined by the gentleman under whose care he then was, without his being able to detect any evidence of disease in either. There was no alteration in the length of the limb, or in the form of the nates; the swelling gave him little uneasiness, and soon subsided by rest and suitable treatment. Shortly after admission he was attacked with violent pain, and acute inflammation, of the hip-joint and upper part of the thigh, which, notwithstanding a strict observance of the recumbent position, and the frequent application of leeches, with other antiphlogistic treatment, terminated in a large abscess, which pointed in the inferior part of the groin. This was cautiously opened by puncture, which gave exit to a considerable discharge of pus. However, this was soon succeeded by a fresh collection. In the mean time the pain in the hip-joint was urgent in the extreme. About seven or eight weeks after admission it was ascertained, at the morning visit, that the limb was shortened, with considerable inversion of the foot, too plainly indicating that luxation had taken place. From this period there was a succession of abscesses near the joint, terminating in fistulous openings. The constitution, as may be supposed, sympathized with the severity of the local disease, and wasting discharges, extreme emaciation, total loss of appetite, profuse night-sweats, with the other accompaniments of rapid hectic, brought the patient to the verge of dissolution. The integuments in the neighbourhood of the sacrum, and at the lower part of the back, were sloughing, from pressure, but this distressing complication was completely relieved by the use of Doctor Arnott's hydrostatic bed. His constitution was supported with wine, porter, and nutritious diet, and by a perseverance in these means he slowly rallied. The discharges from the fistulous openings, gradually lessening, at length almost ceased; the head of the bone became firmly anchylosed in its new position, and the recovery of the patient was so far advanced, that he was able, with the assistance of crutches, to move about the ward, and occasionally, in the garden, at the rear of the hospital. About seven or eight days previous to his death, he complained of a deep-seated pain in the right iliac fossa. Pressure in that region increased his sufferings very much. The pain extended from this point over the entire abdomen, which became swollen, and exquisitely tender to the touch. The man had constant thirst, and incessant vomiting, which could not be controlled. His drinks were rejected, apparently without muscular effort, immediately after being swallowed. The countenance was sharp and anxious, and the pulse weak and rapid, with extreme prostration of strength. These symptoms terminated fatally on the 20th of September.

*Autopsy.*—The body was, generally, extremely emaciated. The abdomen was tumid, and on opening that cavity, there was found considerable effusion of serum, with flakes of coagulable lymph. The peritoneum presented the usual marks of inflammation, being in many parts coated with lymph, and its capillaries being minutely injected. The liver was in a state of hypertrophy, but it was not altered in structure; there was sero-purulent effusion in the cavity of the pelvis.

On making an examination of the hip, the head of the femur could be felt in its new situation, not admitting of motion in any direction. The limb was somewhat shortened, with complete inversion of the foot. Before I proceeded to the dissection of the joint, I wished to ascertain the route of the different sinuses, by laying them open with a bistoury, and tracing them to their

terminations. There was a small opening in the upper and outer part of the groin, just beneath Poupart's ligament. On passing into it a small flexible bougie, I was surprised to find its course to extend upwards, towards the abdominal cavity. On tracing it I found a long narrow fistulous tract, which traversed the iliac and psoas muscles, and terminated at the spine, where the two last dorsal vertebræ were found extensively carious. Another fistulous orifice was situated at the outer part of the hip. On laying this open upon a grooved director, it brought me, by a tortuous route, to the acetabulum, the bottom of which was completely destroyed by caries, and allowed the director to pass freely through it into the cavity of the pelvis, thus establishing a communication between this cavity and the surface of the body. There was, likewise, a fistulous opening at the outer part of the thigh, lower than its centre, with one or two other fistulous openings of minor consideration, in the neighbourhood of the joint. The glutæus maximus and medius muscles, were much wasted, and intimately adherent to each other, and to the parts beneath, which were altogether changed in structure, being converted into a tough fibrous mass, difficult to be cut with the knife. The glutæus minimus, pyriformis, gemini, and obturator internus, with the sciatic nerve, were all so blended together, by the effects of repeated attacks of inflammation, and deposition of this new fibrous substance, that it was impossible to distinguish one structure from another. I could not perceive any thing resembling a capsular ligament. The posterior border of the acetabulum was destroyed by ulceration, and the anterior surface of the head of the femur was found immoveably fixed, and resting on the ilium, close behind it, approaching the ischiatic notch. The great trochanter looked forward, and somewhat outward, in front of the original articulating cavity. Where the head of the bone rested, a new socket was formed, rather by a depression of bony matter around it, than from absorption of the part of the os innominatum where the head was fixed. The acetabulum was much occupied by a ligamentous structure, but its bottom was destroyed by caries, and, as has been previously observed, led by a fistulous opening into the cavity of the pelvis. The head of the bone did not seem to have suffered much from caries, as it appeared to be undiminished in size. A preparation exhibiting the diseased parts is preserved in the Museum of the Hospital.

*Remarks.*—I am aware that Mr. Brodie, in his admirable work on diseases of the joints, has given instances of caries of the acetabulum, opening into the pelvis. In the dissection of one case, he says, "At the bottom of the acetabulum there was an ulcerated opening, just large enough to admit a common probe, communicating with an abscess within the pelvis." In another case, he remarks, "there was an ulcerated opening at the bottom of the acetabulum, communicating with the inside of the pelvis." He likewise refers to two preparations belonging to Sir Astley Cooper, in which the abscess burst into the rectum. Other authors have recorded similar facts, but I am not aware of any instance where peritonitis was the consequence, except in the case I have just related. I have no doubt but that the peritonitis was the result of the carious acetabulum communicating with the pelvis, and I am strengthened in this opinion from the circumstance of the man's complaining of deep-seated pain in the right iliac region, for two days previous to its being fully established. I do not see much difficulty in arriving at this conclusion, where a fistulous tract exists, one orifice of which opens on the outer surface of the hip, and the other upon the inner wall of the pelvis. May not inflammation have been transmitted by continuity to the structures immediately within the pelvis, and from thence to the peritoneum, the secretion from the fistulous passage acting as a foreign body? When luxation occurs as a consequence of this disease, I believe that the head of the bone is almost always found to have passed *upwards* and *outwards* on the dorsum of the ilium. In one instance only has Mr. Brodie observed a luxation *forwards*, "the head of the bone resting on the pubis." In the case which I have related, the head of the bone does not occupy either of these positions, but is thrown *backwards* behind the acetabulum, and in a very slight degree upwards. Observing the extreme tenuity of the bottom of the acetabulum, a person unacquainted with the resources of nature in resisting the effects of disease, would feel surprised that matter did not more frequently make its way inwards in such cases. Velpeau, in his "Surgical Anatomy," has the following judicious observation upon this point:—He says, "the bottom of the acetabulum is so thin, that it would be very easy to perforate it in disarticulating the thigh, and thus plunge the point of the knife into the pelvis. On the other hand, caries or necrosis may traverse it also, as too frequently happens in severe coxalgia, and if the pus do not then escape into the cavity of the pelvis, it is because the soft parts which line it become thickened and indurated, in proportion as the disease advances, and thus oppose to it a more or less solid barrier, but which, nevertheless, is not insurmountable."

Dublin, Dec. 22, 1835.

## TRIAL OF MEDICAL MAGNETISM

AT WESTMINSTER.

*To the Editor of* THE LANCET.

SIR,—As I perceive with regret that my name has been alluded to in connection with mineral magnetism in your report of what took place at the *Westminster Medical Society*, I must, in justice to myself and the public, crave a corner in your valuable journal, to state a few facts connected with this subject. The virtues ascribed to mineral magnets by one party and denied by another, are, you are well aware, by no means new.

Dr. Schmidt asserts that his peculiar method of charging or increasing the power of the magnets is new, at least in this country, and his method of producing a north pole by a north, and a south by a south, while Drs. Faraday and Ritchie assert, on the contrary, that there is nothing new in the method; and as to the poles producing any other than these opposites, it is a complete fallacy, and both these gentlemen deny in the most positive manner the curative powers; and further, that no physiological effect can be produced by them,—that on the living body they are totally inert.

But to enable Dr. Schmidt to prove the physiological as well as the curative powers of his magnets, the *Westminster Eye Hospital* patients were offered him for his selection, and it seems that from eight cases of amaurosis, Dr. S. selected four of the most favourable for the magnets. At the end of two weeks, on Saturday the 12th inst., to the surprise of many, and myself among the number, Mr. Hale Thompson reported to the *Westminster Medical Society* "that the mineral magnets had produced a certain physiological effect, both at the Eye Hospital and the *Westminster Hospital*, namely lachrymation and great mobility of the iris." As I felt very much interested in the subject, it occurred to me that instead of magnetic influence, the physiological effects mentioned by Mr. H. Thompson might be produced by the cold of the magnet. I immediately had a bar of wrought-iron, of nearly the same weight as the magnet, made in the form of a horse-shoe, and on Wednesday the 16th inst. in the *Westminster Eye Hospital*, Dr. Schmidt himself tried the effect of my bar of wrought-iron on Mr. H. T. and on several other medical gentlemen present, when precisely the same physiological effects were produced on all. What curative effects may be reported, of course I have not the means of judging. In the above investigation I have had nothing for my object but an inquiry after truth, no person, no not even Dr. S. himself, will rejoice more than I shall do, if the magnets can be brought to our aid, if only in the alleviation of human suffering. By the insertion of the above you will very much oblige me. I remain, Sir, your very obedient servant, ROBERT DAVIDSON.

Parliament-street, Dec. 29, 1835.

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## SCHEME

FOR REGULATING

## PAROCHIAL MEDICAL ATTENDANCE.

*To the Editor of* THE LANCET.

UNCONNECTED as I am with any *party* in the profession, I have no hesitation in expressing my sincere pleasure on perceiving a modification of your views as to the origin of the abuses now perpetrated in the rural districts, under the name of "Medical Relief."

In the excellent observations contained in the leading articles of the three last Numbers of THE LANCET, you place the question in its true light. The blame attaches to the entire *administration* of the Poor-Law, and the Somerset-House gentlemen, as the head of that administration, are the *principal*, though by no means the *only* offenders; nor is there any probability of redress until "the conduct of the Poor-law Commissioners and their assistants be brought before the consideration of the executive Government and Parliament."

But of what use will complaints be, unless we are provided with a remedy? In accordance, therefore, with your general request to the profession to furnish suggestions, and as an answer to your direct question, "what is the scheme that medical practitioners would recommend?" permit me to propose a plan, which, as far as it has any merit, will recommend itself to your attention, and to that of your numerous readers; and, even should it be altogether undesirable, will, I hope, be the means of calling forth more suitable and unobjectionable schemes of amendment. I propose, therefore, three principal measures.

I. That there be a certain and uniform remuneration for parish medical attendance.

II. That parochial surgeons be fully authorized, in every case, to decide upon the necessity of their assistance to sick paupers.

III. That the rate-payers of each parish appoint the medical attendant of their poor.

1st. *As to Remuneration.*—The principle of appointment by "tender," as a *test* of the qualification of medical candidates, is so manifestly wrong, so fraught with evil, so unfair to settled practitioners, and so pro-

ductive of transactions disgraceful to the character of the profession, that its abolition would be hailed with satisfaction by every medical man, except those infatuated speculators, whose object is, *at any risk*, to occupy a point *d'appui*, from which to invade the practices of their previously established brethren. Nor is the plan adopted in some other Unions more defensible; viz. a certain remuneration offered, far below the previous expense of medical attendance, without any reason assigned, except that of "economy," and forced upon the medical residents under the threat of introducing one of the students, or half-pay surgeons, whose names are on a list at Somerset House. Both these abuses would be removed by the adoption of a scale of remuneration, calculated upon the real cost of proper medical attendance. But suppose the principle of a fixed scale of remuneration were determined upon, several questions arise as to the *mode and data* of its calculation, and as to the *persons* by whom it should be calculated.

2nd. *As to the mode;* it must be either estimated by the total number of paupers in each parish—or it must be by an average payment for each case of illness. The former appears most generally acceptable to medical men, and is proposed in an able pamphlet by Mr. Yeatman, of Frome; if adopted, however, the *distance* of parishes from the medical officer, as well as the *superficial extent* of large parishes, must be provided for in addition to his plan.

But I doubt the propriety of this mode, for the following reasons:—1st, the difficulty of the calculation is much greater. Indeed, I know not exactly how a scale, containing a variation in the number of paupers, a variation in the distance of parishes, and a variation in their superficial extent, could be compiled; and without either of these three items it would be imperfect as a guide to a fair and reasonable remuneration for the trouble and expense bestowed. 2ndly, the total number of *paupers* is not by any means always proportional to the number of *sick*. 3rdly, disputes might often arise as to who are strictly paupers; since the regular paupers of the country are rapidly diminishing, as a distinctive class. And 4thly, it is probable that the administration of the Poor-law will reduce the number of *paupers* much faster than the number of *patients* who must be attended by the parish surgeon.

None of these difficulties present themselves with the payment per case; and it has the advantage of being recommended by the Poor-law Commissioners. Each separate payment must, however, depend on the total number of patients likely to be attended, and on the distance of every patient from the medical officer. These two conditions would comprise the three variations of the preceding mode of calculation, and might be easily embodied in a scale similar to one proposed by Mr. Rumsay, of Chesham, to the Wycombe Board of Guardians. The objection to a payment per case is, that it is a temptation for the relieving officer to withhold slight cases from treatment. This objection is so valid, that it would be absolutely necessary to deprive the relieving officer of this power, before the plan were adopted. Then it would be unobjectionable. But more of this under my next proposition.

As to the persons by whom the calculation should be made, most certainly it should not be entrusted to the Poor-law Commissioners, nor to our own body, exclusively; but I think it might be fairly settled by the two parties in conjunction, that is, the country practitioners might appoint a certain number of deputies (the fewer the better for the execution of the business), who should have power to treat with the Commissioners on the subject; or, what would be preferable, the Government might appoint some disinterested persons, whose attention may have been previously directed to the expense of medical attendance for the poor, to decide on the amount of remuneration.

By whomsoever made, the scale should be in force only for two or three years, in order that unavoidable defects may be rectified, and unforeseen variations in prices may be periodically adjusted.

3rdly. *As to the power of "ordering" medical attendance for the sick paupers.* This must no longer remain in the hands of the relieving officers. It is utterly unjustifiable that these men, who in many instances are ignorant and unfeeling, necessarily absent from home during the greater part of their time, and anxious to curry favour with their employers by a rigid parsimony,—I say it is monstrous, that to these persons should be intrusted the delicate, important, and prompt decision, as to whether the applicant requires medical assistance. Almost all the coroners' inquests that have been held on neglected paupers since the introduction of the new Poor-law, have implicated the relieving officer.

It appears to me, therefore, that the medical officer must be the first referee in every case, nor should the sick pauper have to do with any other authority until medical advice has been obtained. Some check would, of course, be required on the surgeon, to prevent the lavish distribution of relief to those whose circumstances do not entitle them to parochial assistance, and this might be arranged by a subsequent appeal to the relieving officers, or by the Board of Guardians declaring that the relief afforded is by way of loan, to be recovered according to the provisions of the Act on that head.

4thly. *That the rate-payers of each parish should elect their medical officer.* This point is one, which is rather likely to be passed

over as unimportant; to me it appears far otherwise; for even supposing that the first and second propositions should be agreed to, the Boards of Guardians would still have it in their power to inflict much personal injustice and general injury, by the appointment of unfit and unacceptable persons to fill the responsible situation of parochial medical attendant.

Indeed, in proportion as the office might be made a more desirable one, so would a system of jobbing and favouritism prevail more generally in these appointments. In a union of twenty or thirty parishes, the guardians cannot be expected to know the merits of each medical candidate, nor to judge impartially of the wants of each locality; the friends of the influential members of the board would, therefore, frequently be chosen in preference to the independent practitioners, who might possess no other recommendation than the confidence and good will of the parish in which they reside, — a recommendation which *now* often tells more against than for a candidate. Above all, the vile system of *medical districts* might still continue in force, for although the guardians would be unable to economize by it as they do at present, yet the mere wantonness of power, and the absurd fancy of simplifying their arrangements, might lead them to appoint three or four medical officers, where ten or twelve ought to be employed. These apprehensions are not merely speculative, but arise from a close observance of the working of present measures.

Not only, therefore, as a preventive to these evils, but as due to the parishioners and to the medical profession, let each parish elect its own surgeon. The *merits* of the candidate will surely then be the only question with the electors, and as no increase of expenditure would follow their exercise of the right of suffrage, it is but in accordance with the liberal spirit of the age that it should be extended to them.

The contested election between Mr. Cosgreave and Mr. Dunn, for the parochial surgeoncy of St. Clement Danes, is a striking fact in support of my proposition. If four or five guardians had been left to settle that matter, it is just as probable that Mr. Dunn would have succeeded as Mr. Cosgreave, although the latter was obviously entitled to hold the office, from "the humanity, skill, and industry, with which he had for nine years discharged his duties in that parish." Your remarks on that election were as just as its termination was fortunate.

Once more, therefore, I submit that, to put an end to the vexatious and unsatisfactory mode of appointment now in vogue, to increase the respectability of the office, and to prevent future chicanery and patronage, the rights of the rate-payers should be restored, and the parochial surgeon elected by the votes of the majority. This election need not interfere with the supervision which the Boards of Guardians, as the executive power of parishes, must continue to exercise over the conduct of all parochial functionaries.

I have now, Sir, laid before you the heads of my plan,—there are many details which I refrain from troubling you with. Trusting to your liberality for the insertion of my remarks, I remain, at present preferring to be known only as, your obedient servant,

RURICOLA.

Dec. 21st, 1835.

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## PLAN

FOR REGULATING

## MEDICAL ATTENDANCE ON THE SICK POOR.

"Da dextram misero."—VIRG. Æn. lib. 6, l. 370.

*To the Editor of* THE LANCET.

SIR,—You have, in advocating the cause of more than a million of the human race, when suffering from disease, very properly reminded the profession, that the time is fast approaching when its members should agree on some "almost unobjectionable plan," for the removal of the gross defects of the present system of medico-parochial relief. You truly intimate, that all concur in the necessity of a change in the system, and that the only question is, what are the principles on which the alterations should be made, and how they should be carried into effect? And, finally, you have most judiciously observed, that it will be of little use again to direct the attention of the House of Commons to the subject, unless the profession be provided with a remedy for the evils, already so fully made known, and so generally acknowledged.

It is now nineteen years since my sentiments on the medical care of paupers were first recorded in the *Medical and Physical Journal* of London. In the year following a plan was suggested by me for legislation, which was published by Longman and Co. The scale of medical pay, as contained therein, was not, however, sufficiently graduated, and was much too high to be likely to receive the sanction of Parliament, from which quarter alone any fair and final settlement of the question was to be expected. From 1818 to 1834, I watched, even more carefully than before, the working of the contract system. Meanwhile, the pamphlet alluded to was distributed among Members of both Houses of Parliament, the clergy, and the medical profession; and, lastly, despite of expense and discouragement, a new

and improved edition was circulated, like the former, first inserting a copy of it in THE LANCET for April, 1831, with a graduated scale, which cost me no little labour to construct. My plan, which embraces one uniform system in the appointment and salaries of parish surgeons, consists mainly,

1st. Of a graduated scale of remuneration per head, and per hundred, of paupers, falling in price, in proportion to numbers, but below which rate of pay, no surgeon should be permitted, by law, to contract.

2nd. It recognises the principle of a comparatively *minute* division of medical labour, secured by appointing surgeons to parishes, or districts, in *rotation* (after two years' residence and practice), and limiting them to the care of two thousand paupers, annually, where medical men can be obtained in the immediate neighbourhood of the respective parishes or districts.

3rd. The contracts recommended, are to include casual paupers and interlopers, the treatment of compound and simple fractures and dislocations, and those attended under a suspended order of removal; no bill for extras being allowed, except for midwifery and trusses.

4th. It is also recommended that no pauper should receive medical relief, without an order from the proper authorities, unless in very urgent cases.

Permit me, Sir, to refer my professional brethren to No. 400, page 151, et seq. of your periodical, for the details of the plan alluded to, and to express a fervent hope that they will support it, unless they can produce one more worthy of their confidence, and of my humble but zealous assistance.

Many valued correspondents approve of the plan under consideration, while some propose, in addition to the salaries, so much per mile for journeys beyond the first mile. This item of pay, I apprehend, would be opposed in Parliament, because it would unsettle the amount of salaries, and open the door to real or supposed imposition. Surgeons would be suspected of performing more journeys than necessary. My experience, however, and close attention to the whole of this most important subject, induce me to recommend that the expense of drugs be defrayed by parishes or unions, instead of by medical contractors, the amount of which would be in augmentation of professional remuneration under my scale; and this probably might meet the views of those who think it too low, while it would remove all suspicion of paupers not being duly supplied with medicine. The medicine to be furnished by select vestries or guardians, with the advice of the parish, district, or union surgeons, and to be placed in a room fitted up for the purpose by order of guardians or vestries. This room to be in a convenient situation, at which the surgeons or their assistants should dispense the medicines, at stated hours, except in cases of emergency, when it should be done, as heretofore, at their own houses and at their own expense.

The union of parishes has increased the number of medical monoplies, and, in the same proportion, has rendered it impossible to discharge the medical duties, while many districts of unions are much too extensive for the medical superintendance of individual surgeons. The former miserably low rate of pay has been reduced in the districts and unions, and advertising for tenders is, in effect, farming out the care of the sick to the lowest bidder. In short, the well-known evils have been very recently multiplied and aggravated.

In defending the appointment of young surgeons, immediately from the schools of medicine, the Poor-law Commissioners speak of the superiority of their education, as compared with that of their elder brethren affirming it to be equivalent to the experience of the latter. But this singular argument, applied only to one of the departments of medicine — midwifery — will lead, if acted upon, to inhumanity and death; since in difficult cases of childbirth (about which alone, parochial, district, or union surgeons are consulted by midwives), nothing short of experience will enable them to overcome the difficulties of the case.

Another error of great magnitude has been committed by the commissioners, in advising guardians to pay surgeons so much per patient, instead of per pauper, per annum. The relieving officer, knowing nothing of the insidious approaches of disease, will, in numerous instances, refuse orders for medical relief, except in obviously severe and protracted cases of illness and accident. And it is frightful to contemplate as to what may become of pauper sick, after the half-crown fees, per patient, shall amount to the former salaries, for attendance on whom the district and union surgeons are not to be paid one farthing.

To amend the law regarding the medical care of paupers, will be as great a benefit to parishes as to the sick and hurt poor, since the latter, being more skilfully treated, will sooner be removed from the list of those receiving parish support. How many cripples, blind persons, and individuals unable to work, have remained through life a burden to themselves and parishes, in consequence of medical neglect, and the bad management of fractures, dislocations, and diseases of the eye, and of those numerous chronic forms of disease, the victims of which might have been restored to health and profitable labour, if duly supplied with medicine and advice in the earlier stage of disease! How many parents have died, who might have been saved under a better system of medical relief, and whose families have been thrown on their parishes for support! To say nothing of the impulses of humanity, a

change of system may be truly advocated in Parliament, in accordance with economy. No pecuniary saving will result from leaving one portion of the pauper population to the care of medical contractors, at 2s. 6d. per patient, while another portion is to depend only on the eleemosynary aid of medical practitioners, notwithstanding the fact that their services in this way are beyond all praise,—services performed like those of the illustrious Boerhaave, who declared the poor to be his best patients, because God was their paymaster.

I remain, Sir, your obedient servant,

J. C. YEATMAN.

Frome, Somerset, Dec. 28th, 1835.

## THE LANCET.

*London, Saturday, January* 2, 1836.

IT may suit the feelings and objects of certain mischievous imps who play their tricks in the temple of bigotry in the Strand, to allege that the professors, the Council, and the proprietors of the *London University*, or, as it is hereafter to be called, *University College*, have been endeavouring to obtain for that institution an all but exclusive nomination in the charter, which it has been proposed by the CHANCELLOR of the EXCHEQUER to frame for the establishment of a metropolitan university. The allegation is a gross, unqualified calumny, so far as the professors and the Council are concerned. What may have been done by the proprietors, generally, or by individual members of that body, we know not; but it is notorious that neither the members of the Council, nor the professors, have ever made any application to the Crown, or to the executive Government, for any, the smallest exclusive privilege, either for their own benefit, or for the advantage of the institution to which they are attached. When they endeavoured to obtain the power to confer degrees, neither in their petition, nor in the arguments of their advocates before the Privy Council, was a single fact stated, or an argument advanced, which had a tendency to throw into the shade the merits of their contemporaries, or the claims of other bodies to legislative honours and protection. This position was assumed with perfect justice, and was maintained with boldness and consistency. The senate claimed for their pupils those honours which were awarded at other universities, and where higher, or more efficient appliances for the acquisition of such honours, cannot exist. There was not the slightest pretension to exclusiveness, in any one of their demands; but having felt that they were fully capable of rendering their pupils competent to undergo an efficient examination in literature, in the arts, and in the sciences, they claimed the privilege of awarding university honours, under the sanction of a charter, because, and only because, there was no public examining body in the metropolis to which the candidates for university distinctions could be referred.

No sooner, therefore, was the proposal made, that an university should exist in the metropolis, under the sanction of a charter granted by the Crown, than did the professors of the University willingly say "content" to the principle of a scheme which would recognise before the Examiners of the Metropolitan University, the perfect equality of all the candidates for literary and scientific honours and distinctions. In taking this course the professors judged rightly, both as regards their own reputation and the interests of the public. They have honestly denounced monopoly, and they courageously rest their hopes of success for their pupils, on the abilities which they (the professors) are capable of displaying in the discharge of their duties. Besides, it must be recollected, that the act of applying to the Examiners who are to be appointed by the Crown will be a voluntary one. There will be no compulsion whatever in the case. The student may, or he may not, become a candidate for the degree, and it would be madness to suppose that a curriculum will be framed which shall have

the effect of determining the period at which a man must choose to become a candidate for university distinctions. This consideration, as well as a multitude of others, clearly points to the necessity of establishing the University in this metropolis upon the broadest basis—upon the most liberal and well-understood principles. It would be far better to be without any university in London than to create a new monopoly, though a new monopoly would be created beyond any doubt, question, or cavil, if the pupils of particular institutions are to be selected for examination, to the exclusion of all other applicants. What is it that the Government designs to honour? Is it learning? Is it a knowledge of science? If it be so, let the fact be declared, and let the example accord with the precept. If, on the other hand, the honour is to be obtained because there had been weight of metal in the pocket, instead of solidity of information in the head, why let an accordant declaration be honestly and boldly made. We have always in this country laboured under the misfortune, in our national transactions, of *beginning at the wrong end*. In short, money has been made a passport to every office, to every distinction,—except, indeed, in those few cases where money, after talent has been left to work its way up to a certain point, has been used as the instrument of temptation, for moulding down the possessors of talent into pliant tools, to be used by the hand of power. It really would appear, from what is passing before us, that there is to be a free trade in every thing except in the means of obtaining knowledge and literary distinction; but is a principle which is odious in the ordinary and gross occupations of trade, to be continued for the purpose of fettering, restraining, and binding down, the faculties of the human mind? Without adverting to the general restrictions which have hitherto existed in trade, let us turn our attention for a moment to the charter of the City of London, and advert to the control which can be exercised, through its possession, over the proceedings of Smithfield market. Suppose that in that charter the names of two or three counties in England had originally been introduced as those of favoured places, and that no cattle were allowed to be sold in that market, unless they had been bred in the counties particularized, the charter requiring that "certificates" in evidence of that fact should be produced by the sellers, to the full satisfaction of the Company of Butchers, that no deception was attempted, that no fraud on the terms of the charter was about to be practised. Not one whit more glaring is such an absurdity, and, probably, not half so pernicious in operation would be the possession of this exclusive privilege on the part of the favoured counties, as would be the exclusive privileges of two or three institutions in the metropolitan universities, if any were secured to them by the proposed royal charter. The public would naturally say, "How monstrous a thing is this! Here "we are deprived of excellent beef, because "no oxen can be sold in Smithfield, unless "it can be satisfactorily certified that they "were bred in Oxfordshire, Lincolnshire, or "Devonshire! And, more monstrous still, "the graziers in those counties, knowing "that no other cattle than theirs can be "received into the market, have become "quite indifferent about the breeding, and "comparatively careless in feeding their "stock, placing full reliance on the force "and value of that exclusive and monstrous "privilege which has existed so long in their "favour. Why should there exist any other "law upon the subject, than one which gives "to every proprietor the opportunity of "making the most of his stock? There are "the oxen. They exhibit their own qualities. The slaughterers who purchase "them are fully capable, from experience, "of testing the nature and value of those "qualities. Why, therefore, should legal "restraints of any kind exist, relative to the "breeding, the buying, and the selling of "cattle? Common justice demands that

"the occupiers of the soil in every county "in the kingdom, should be placed on a "perfectly equal footing, and the interests "of the public require that the principle of "competition should be allowed to operate "in the market, with a free and perfectly "unrestrained scope." It is perfectly clear that the man who breeds the best cattle wants no protection from the law, and it will, we hope, be willingly acknowledged that the farmer who breeds the worst cattle, ought not to enjoy a monopoly in the arena of sale.

What has the exclusive system accomplished at Oxford and at Cambridge? What has the same system accomplished in the hands of the knavish medical corporations of London? What has the certificate exaction wrought for SCIENCE, or for THE PUBLIC? The gentlemen who are engaged in framing the new charter should furnish the reply to these questions. Degrees have been granted, diplomas have been conferred, licenses have been sold, all under the operation of the certificate system. And what do we discover as the result? Why, that men of acknowledged talent, who enjoy University titles and collegiate distinctions, constitute the *exceptions* from the general mass, and that the great body of titled graduates, possess no claims to public confidence, either in science or in literature. We have had enough, then, of the old system. Away with it, and for ever. Let the Government establish in its place an institution which shall be ruled by the principles of justice and common sense, and let public utility be the mark towards which every arrangement and every formulary shall be directed.

There are some gentlemen of known ability, and acknowledged liberality of sentiment, who profess to be of opinion that an examination, however comprehensive it may be, or however well it may be conducted, cannot be rendered a sufficiently satisfactory test of the quantity and quality of the information which is possessed by a candidate who is under examination for a license or a degree. These persons, we say, are necessarily DISQUALIFIED FROM OCCUPYING THE OFFICE OF UNIVERSITY EXAMINERS. They have too much doubt of their own powers, to allow them to analyse with correctness the powers of others. If men of sense had not put forth such a statement, we should unhesitatingly have termed it "nonsense," and have received it as the mere vapouring of undoubted imbecility. If, however, we were to admit to these parties, which, of course, we should only do for the sake of argument, that the examination is not an adequate test of the abilities of the examinee, would the production even of half a thousand certificates of attendance upon lectures, add to the number of the mental acquirements of the candidate? Would the possession of such documents increase his capabilities? Obviously not. But the display of a bundle of "certificates,"—which, in reality, are only so many receipts for money paid,—might produce a most pernicious impression on the minds of the Examiners, as it is next to impossible to believe that those gentlemen would consider that the candidate had been defrauded out of so many pounds sterling, through the operation of the curriculum of the University.

What just, what legitimate, what philosophical, or what rational connection is there between the *payment of money*, and *that state of mind which renders a person capable of showing that he is entitled to distinction in the ranks of his scientific and literary countrymen?* Let this be shown, and we will hereafter remain silent on the subject. In the meantime we shall confide in the enlightened views of the Government, and shall continue to think that the Professors of *University College* have done themselves lasting honour by disclaiming for the celebrated institution to which they belong, every privilege which is not to be held in common with even the least distinguished of their contemporaries.

THE circumstances attending the appointment, by the Irish Government, of a successor to the late Mr. M'DOWEL in the *Richmond Hospital*, illustrate, in a very striking manner, the absurdity of the present mode of disposing of medical offices; and also place in a striking light the opinion which is now held respecting it by the public and the profession.

Formerly, when an appointment of this kind was at the disposal of the Government, the matter excited but little attention. Under vicious rulers, professional worth is compelled to forego its claims, and leave promotion to be quietly settled between corrupt patronage and its dependants. This has been more particularly the mode of advancement in Ireland, where a "chosen people," few in number, and resident in the midst of a great population, monopolized every place of advantage or emolument within the gift of the Crown. No one, indeed, ever thought of disturbing the settled rules of nomination to vacant situations. The predestined possessor of place was generally foreknown, and his induction permitted without any attempt at competition, and almost without complaint. The Tory administration of affairs in Ireland bred their own agents, and none but the produce of the old stud were suffered to enter the field.

But at last the case is altered. The extension of civil rights in Ireland, by widening the grounds of eligibility, and inspiring hopes of preferment, has enlarged the sphere of rivalry for official situations, and raised a host of candidates to urge their claims with all the sturdiness of new-born liberty, and the watchfulness naturally excited by long-endured exclusion. The principles of equity in the distribution of patronage, which characterize the administration of Lord MULGRAVE, gave an additional impulse to the struggle of political parties in Ireland, and exhibited them, on the present occasion, in a state of unprecedented activity. To such extent, indeed, were applications made to the LORD LIEUTENANT for the vacant place in the *Richmond Hospital*, and with such persevering solicitations, that his Excellency would, we believe, have cheerfully yielded up his power in exchange for an exemption from the vexatious requests to which his office had subjected him. The instant it was known that the life of Mr. M'DOWEL was despaired of, the siege commenced; and before the undertaker had decently interred the remains of the deceased, the Castle was surrounded by applicants for the empty chair. The liberals, of course, were early in the field, and calculated, each, on the congeniality of his principles with those of the executive. Every doctor or surgeon who had an M.P. of the popular party for his friend, at once called the senatorial influence into action, and sought to reduce the Irish Secretary into obedience, by promises or threats of popular power. One candidate, indeed, is said to have stowed *six* Members of Parliament into his barouch, and made an overwhelming "avatar" on Lord MORPETH with this exhibition of representative authority. The sudden and assiduous display of social and domestic virtues which was made on the occasion was most amusing. Fathers and fathers-in-law, brothers and brothers-in-law, uncles and nephews, all forgot their differences in a moment, and struggled to obtain for some dear relative the prize in the lottery of professional life. Every art, in short, which ingenuity could suggest, was put in requisition; and a very pleasant farce, called "The Rival Doctors," might, with very little trouble, be elaborated from the contents of the Secretary's *bureau* relative to this contest.

As a refuge from the responsibility attaching to the discharge of a duty which every Government, thinking correctly and meaning honestly, must consider itself incompetent to discharge rightly, the Irish Executive appointed three commissioners, Mr. CRAMPTON, Mr. CARMICHAEL, and Mr. COLLES, to dispose of the situation. But in

the working of this plan, it is said, the Government was disappointed. As might have been expected, the surgeons differed in consultation, each having his own private interests to advance. The result, however, is, that Mr. ADAMS, one of the surgeons of *Jervis-street Hospital*, and Mr. M'DONNEL, have been appointed; Mr. CARMICHAEL, the friend of these parties, having himself resigned to make way for one of them. The gentlemen selected are certainly well-informed men, and in every respect equal to the discharge of their new duties. Some displeasure, certainly, has been manifested against the Government, for the appointment of Mr. ADAMS, in consequence of his political views, which are said to be altogether *Tory*; but this is a ground of complaint which is hardly to be named in connection with a system of appointment which in its very essence outrages common sense and reason. Under the present mode of arrangement, in fact, general satisfaction cannot be given; nor have any parties a right to complain, so long as they acquiesce in the existing system of elections, and pursue the same obnoxious means of preferment as their successful rivals. What ought the feelings of fathers, or friends, or uncles, Members of Parliament, have to do with appointments to hospitals? Until this wretched means of promotion is abolished, and the "concours" established in its place, expressions of complaint and dissatisfaction will continually attend all hospital elections. Had those who now repine with disappointment met in conference, and, like the surgeons of the hospitals of Paris, on a recent occasion, protested against promotion by the vile machinery of private interest, they would have deserved the sympathy of the public, and the support of the press; but so long as they consent to be the agents of a pernicious and absurd system, they cannot justly look for either. Now their complaints are only mocked. Their own corrupt inclinations, and the incompetency of even the best Government to decide with justice in such cases, save by chance, are now thoroughly understood. From such reasons as these is it that we feel strong apprehensions of the successful working of that part of the Metropolitan University scheme, which gives to the Crown the nomination of the members of the "Executive." In organizing a new project, and putting it into operation, in the first instance, the appointment of the officers by Government, may not only be an excusable, but even a necessary, proceeding. If, however, it is intended that this method should be *continued*, without resort to the "concours," in filling the minor offices, and thus gradually make it imperative on the Government to ratify the election of those men only who, by such an ordeal, prove themselves to be the best qualified among the candidates, why then, indeed, the Government plan could not be too severely reprobated. But, as we have already intimated, we shall await the publication of a draft of the proposed charter, ere we say more on this important subject.

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WE have selected for insertion in this week's LANCET, from several letters which we have received on the same subject, two able communications, (pp. 340, 342,) both containing schemes for regulating the medical contracts in parishes. Mr. YEATMAN has on several occasions discussed this subject with very great ability, and in the letter signed "RURICOLA" there is evidence that the writer has devoted the energies of a thoughtful mind to the question which is now occupying so large a share of the attention of the medical public. A careful consideration of the contents of these documents, must lead to the opinion that no useful or final settlement of a "plan" can take place, unless the parts of which it is composed, receive the most deliberate investigation in the presence of an assembly of medical practitioners. It is not necessary that a large body should meet for the purpose. Ten or a dozen gentlemen, who pos-

sess the capabilities and experience of Mr. YEATMAN, the author of the letter signed "RURICOLA," would be as well qualified to execute the task, as would be a committee of one hundred. But when the importance of the ulterior object of influencing members of Parliament is estimated, the more numerous the attendance, the more favourable will be the chances of carrying out the contest to a successful result. Should it be determined, by surgeons who are practising in the country, to hold a meeting in the metropolis, we would suggest the propriety of postponing it until within a few days after the meeting of Parliament, at which time the members of both Houses of the Legislature might be visited, with the best results, by their medical friends. We hope that experienced practitioners will not be sparing in their remarks on the plans which are this week proposed by our correspondents. The subject, altogether, demands a very patient investigation.

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AN advertisement was published on the cover of THE LANCET of December 19, in which it was announced that a Dispensary had been opened in Aldersgate-street for the treatment of poor persons who may be afflicted with fistulous and other diseases of the rectum. The founder and surgeon of this institution is Mr. SALMON. On first hearing of the proposal to institute such a Dispensary, we felt inclined to question the propriety of adding another to the number of our, so called, "medical charities;" but on giving the subject a more attentive consideration, we are inclined to believe that this Dispensary, if it be conducted on the principles which have been set forth in the prospectus, will be productive of some important advantages, not only to the public but to the profession. The practice of this institution, it must be observed, is to be opened, without the payment of a fee, to all medical practitioners. Thus the profession will now have an opportunity of ascertaining whether that class of diseases which is to be received for cure at this Dispensary, occurs with such marvellous frequency as has been alleged by some living authors who have written on the subject; or whether, in fact, increased experience, and further opportunities of observation, will not tend to confirm the suspicion which has long been entertained by many eminent surgeons, that this department of surgery has long been made a source of profitable and disgusting quackery.

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IT has been denied by the hired tool of the Bats that Mr. LISTON was solicited to become a candidate for the chair of surgery, lately vacant in the University of Edinburgh. The statement, however, which was first published in *The Courier*, evening newspaper, remains not only unrefuted, but is fully confirmed by some remarks which have been made in the Town Council at a meeting of that body, and reported in the *Edinburgh Weekly Journal*. On that occasion Convener DICK said, that

"When Mr. Liston was lately in Edinburgh, performing an operation, he (Convener D.) asked Mr. Liston if he would become a candidate, as the patrons were at that time looking out for a fit person to fill the surgical chair; and Mr. Liston then said, that he would not forego his prospects in London for such an appointment. Since that time, however, having had occasion to write Mr. Liston, he again requested to know if he would come forward; in answer to which, in a letter he had received, Mr. Liston stated, that an appointment to any chair in the University, would not induce him to become a candidate."

This declaration of course will set the question at rest in the minds of all persons who have not some knavish or malignant feeling to gratify. "But oh!" somebody may say, "the Council as a body did not offer the chair to Mr. LISTON." Of course it did not. The experienced men of the North are more cautious in their proceedings than to take such a step. Individual members of the Council having ascertained that Mr. LISTON would not leave London, the Council, as a body, reasonably enough, refrained from addressing Mr. LISTON on the subject. This is the whole of the matter.

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## THE LATE DR. WARREN.

Dr. Pelham Warren died at his house in Berkshire, in the 57th year of his age, after a lingering and distressing illness, during which he was attended by his old and faithful friend, Mr. Pennington. His death was occasioned by an abscess in the liver, which burst into the colon. He was of the atrabilious temperament, and of a slender physical frame, and had a dark and penetrating eye. He was constantly taking snuff, indulged freely in the juice of the grape, and, like all sensualists, was slovenly in his person. The circumstances, altogether, of his life, in which extreme indolence was a predominant feature, made it not surprising that he should fall a victim to hepatic disease. He was laconic in his discourse and somewhat coarse in his manner, and to many was by no means a pleasing personage. On one occasion a lady was humorously describing to him the characters which a sick but very jocose friend had drawn of several medical men whom she had at different times consulted, among whom was Dr. Warren himself. Sir Henry H. she described as having "the manner, flippancy, and flexibility, which would have made him a first-rate valet, or a good lady's maid." Dr. Maton must have been intended, she thought, for "a village schoolmaster," and Mr. Brodie "for a Wesleyan minister." "And what did she say of me?" asked Dr. Warren. "I will candidly tell you, said his friend, that she thought you had a great deal of devil in your face."

Dr. Pelham Warren was the son of the late Dr. Warren, the Sir Henry Humbug of his day, a London pure physician, who was considered to be one of the most expert men in the trade, contriving to leave behind him a considerable fortune, as the result of his talents, without adding one item to the treasures of medical science. Alas! his "knowledge of the world," as it is called, enabled him to secure for his son Pelham an easy and safe path to successful practice as a London doctor. Educated in a school where bigotry had arrived at its *acme*, and corruption swayed unmolested, young Warren had every opportunity of deriving the advantages which attend a classical, and what has of late been even more highly appreciated, an *Oxford* moral education; and between Windmill-street and *St. George's Hospital*, he found quite enough of physic both to answer the purpose of a pure physician, and to procure for him a cordial welcome as a Fellow within the portals of the College in Pall-Mall East,—one of the most venerable and antiquated institutions in the empire.

Those who acquire in the outset of life an ephemeral station in any profession, seldom rise to great eminence in its ranks, for they are bereft of that most powerful of all stimuli, necessity, which excites to industry, and *compels* its subjects, as it were, to acquire knowledge. Dr. Warren's scientific fame, it may therefore be expected, like that of his associates in the College of Physicians, though it was considered quite sufficient to enable him to practise what they considered as the *higher* department of physic, and such alone as are deemed legitimate objects of attention for a pure physician, were not so comprehensive as to allow him to make any addition to medical science. Indeed, excepting one paper, which was published in the "Transactions of the College of Physicians," and the title of which had, for the fame of the deceased, better be concealed, he never even attempted to make a contribution for the advancement of his profession. Dr. Warren had that due contempt for anatomy and pathology which becomes those individuals who assume to occupy the "highest grade" in the profession, and during a period of twelve years, in which he officiated as one of the physicians of *St. George's Hospital*, he used to boast that he had never once been in the dead-house. Indeed, the levity and derision with which this *pure* physician treated everything like pathological anatomy, will scarcely be credited. Sir Benjamin Brodie, in confirmation of this discreditable fact, narrates, with that satirical simper in which the pure surgeons indulge when speaking of their still purer brethren in Pall-Mall East, the following anecdote: "One day, when Warren was waiting in the board-room of St. George's Hospital, to know the result of a post-mortem examination that was going on in the dead-room, he got impatient, and while warming his coccygeal region at the fire, addressing himself to a colleague who was near said, 'This d—d morbid anatomy will spoil the practice of *physic*.'"

As a consulting physician Dr. Warren was not very highly estimated by the "subordinates" of the profession. Possessed of inordinate self esteem, he was more eager to dictate than to suggest means of treatment. He used, also, to prolong his attendance on patients unnecessarily—at all events contrary to their wish, and thus got for himself the character of rapacity for fees.

The circumstance of Dr. Warren's never having applied himself seriously to the study of medicine, or any of the sciences immediately connected with it, is to be regretted, as he possessed a rather better order of intellect than the mass of his fellow collegiates. Had his education and habits been different, his mental powers would have been sufficient to raise him to professional distinction. But consistently with the views and opinions of those by whom he was educated, and with whom he associated throughout life, he contented himself, as we

have observed, with very superficial acquirements, and only piqued himself on a knowledge of Xenophon and Tacitus,—authors whom it is no doubt a gentlemanly accomplishment to understand, but whose works form a very undue portion of those volumes which are necessary to be studied by practitioners of medicine. With all these deficiencies of education, however, he was by no means deficient in practical diagnostic tact, and he was sufficiently well acquainted with the routine of his profession to enable him to fulfil its ordinary duties. Dr. BAILLIE used to say of him that he was a "tolerably good guesser." Many collateral advantages combined to introduce him, early in life, to a considerable extent of private practice; and for some time, estimating him by his income, he was considered a first-rate pure physician, though his fees during the last few years, in consequence of his illness, and the great change which has taken place in the fee-trade of consulting physicians generally, diminished considerably. His illness, indeed, so materially interfered with his attention to business of late, that, contrary to the opinion of many, he left behind him but a very indifferent practice for the aspiring generation to succeed to.

With all his peculiarities Dr. WARREN possessed some of the best feelings of human nature, which it is more pleasant to notice than the imperfections of his character. Some mention being lately made of these in a private circle where the death of Dr. WARREN was the subject of conversation, a lady thus interrupted the conversation. "Ah!" said she, "speak not slightingly of Dr. WARREN. I knew him well. All my family in him placed the greatest confidence, and I know he had a tender heart. He long and kindly attended my beloved sister, who died of consumption in the South of France, whither she was sent in the hope of saving her valuable life. At his last visit she asked him many questions about the danger of her situation and her hopes of recovery, and after having given her the best answers he could, and left the room, my brother, unknown to him, observed him, standing at the top of the stairs, bathed in tears."

In the capacity of a Fellow Dr. WARREN was considered as the leader of a kind of opposition party in the College of Physicians, that opposition, however, not having for its object any "rational" improvement in its constitution, but being aimed to displace or to clip the wings of the President, who had so long ruled with sovereign sway within the walls of that sanctuary. In his political creed Dr. WARREN was a Whig, whilst Sir HENRY was deemed the *ne plus ultra* of ultra-toryism; and although Dr. WARREN's aristocratic feelings and manner towards the "lower grades" were as haughtily exercised as were those of Sir HENRY, yet, as he did not possess the *suaviter in modo* of the Baronet, he never had any chance of unseating the courtly President. Dr. WARREN was by no means a blind observer of human nature, and he was quite familiar with the twistings and turnings of the eel-backed President, and was wont to express himself very freely on this subject. An event took place on the death of the late King, which induced him to express his opinion very decidedly on Sir HENRY, and to pursue a course which was regarded by some at the time as of a very manly and straight-forward kind. His Majesty had scarcely "breathed his last," when Sir HENRY hastened from Windsor, in the dead of the night, to Bushey-park, where then resided the DUKE of CLARENCE, to communicate the doleful tidings to the new King. The occasion which so speedily melted the heart of the royal successor was too favorable to be neglected for making some necessary *worldly* arrangements with WILLIAM the FOURTH, and Sir HENRY's persuasive powers were such, that though the KING, prompted by the best feelings, had declared that he would not change any of the servants of his brother, Sir HENRY convinced his Majesty of the "advantage to the nation" of allowing *him* alone to form the medical staff of the household, and obtained the royal promise to concur in all his recommendations. As might be expected, Sir HENRY, with his usual excellent discrimination, selected his own personal friends to fill every one of the appointments to which any emolument appertained, judiciously awarding to himself the most lucrative. From the position which Dr. WARREN at this period held in the College, Sir HENRY felt that he could not entirely pass him over in the new arrangements; yet he wished to place him in no situation of distinction. So, without asking Dr. WARREN's leave, or saying one word to him on the subject, he gave in a list, and got it at once *officially* announced, in which Dr. WARREN appeared with the inferior title of "Physician *Extraordinary*." According to professional etiquette this was considered both degrading and insulting; so when this appointment was announced to Dr. WARREN, he declined the honour in the most contemptuous manner, emphatically declaring "that he would be d—d if he would accept any appointment from HALFORD," at the same time addressing a letter to Sir HERBERT TAYLOR, the King's private secretary, requesting him to cancel the appointment.

On another occasion Dr. WARREN displayed similar feelings of contempt at the conduct of the President. When the ephemeral conversaziones at Pall-Mall East were first got up, every means were adopted to procure a crowded attendance, in order to show the influence and popularity of the

College, and persons of every denomination, from the cabinet minister down to a Treasury-clerk, — from the archbishop to the curate, received invitations. The apothecary "par excellence," the chemist and the druggist, "subordinates" and all, received cordial invitations to become actors in the scene. With a view to make the contrast between the Fellows and the licensed physicians on this occasion the more striking, it was contrived that the cards of invitation should be issued in the name of the President and Fellows, and that the Licentiates should thus be *invited by the Fellows* to attend the meetings of *their own College*. The insult had not the effect of driving away all the licentiates, though it was sufficient to prevent the most respectable amongst them from submitting to the humiliation. This, however, was not enough by way of contrast, and the ingenious President therefore proposed that, to give additional lustre to the "higher grade" in the College, all the Fellows should appear attired in their collegiate robes. To this proposal Dr. WARREN contemptuously objected, observing, "that Sir HENRY, if he chose, might make a mountebank *of himself*, by wearing his robes, and he did not care if Sir HENRY came to the College with a feather in his ——."

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SINCE the day on which the Council of the College of Surgeons admitted the *Charing Cross Hospital*, with its sixty beds, into the list of "recognised" hospitals, it has been a gradually increasing object of desire with the managers of the *King's College*, to connect the College with that hospital, the medical department of the College having wholly failed in its efforts to obtain "remunerating" classes of students, and at last, we understand, the urgency of the case has led to the commencement of negotiations with the medical officers of the hospital, but as yet the parties in the College have not got beyond an assent to the demand of Messrs. PETTIGREW and HOWSHIP (who carry their heads exceedingly high on the occasion), that Mr. MAYO and Dr. F. HAWKINS shall resign their professorships in favour of Mr. PETTIGREW and Dr. SHEARMAN. It is most probable, that, on finding themselves out of employment, Messrs. MAYO and HAWKINS will retire to the *Middlesex School*, where, however, matters are in almost as bad a condition as they are in the Strand. Yet, after their late and not yet finished correspondence, it is difficult to imagine how Messrs. MAYO and HAWKINS can act congenially together again in any school.

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## CORRESPONDENTS.

INSTEAD of publishing any one of several letters which we have received relating to the following subject, we beg to say that a general impression seems to be entertained in the *Medico-Chirurgical Society*, that it is contrary to good taste, good judgment, and the spirit of his office, for the president of the meeting, whoever, for the time being, may occupy the chair, to address the assembly on the subjects under discussion, so many as twelve times in one evening.

We have mislaid the letter on Creosote in the case of vomiting. Can the writer furnish us with a copy of it?

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## METEOROLOGICAL REPORT.

(*Extract from a Meteorological Journal kept at High Wycombe.*)

| Days. | Thermometer. | | Barometer. | | Rain. | Wind. | Weather. |
|---|---|---|---|---|---|---|---|
| | Highest. | Lowest. | Highest. | Lowest. | Ins. Dcls. | | |
| Dec. 21 | 29.50 | 21.25 | 29.98 | 29.88 | — | N.E. | |
| 22 | 32.25 | 19.50 | 30.25 | 30.09 | — | N. | The whole of the week |
| 23 | 28.75 | 24.50 | 30.28 | 30.27 | — | S.E. | |
| 24 | 26.75 | 15.50 | 30.19 | 30.15 | — | S.W. | remarkably fine for |
| 25 | 26.50 | 12. | 30.12 | 30.08 | — | N.W. | |
| 26 | 26. | 13. | 30.10 | 30.06 | — | N.E. | the season. |
| 27 | 34.25 | 29.75 | 30.00 | 29.97 | — | S.W. | |

Dec. 29th, 1835.

W. JACKSON.